



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

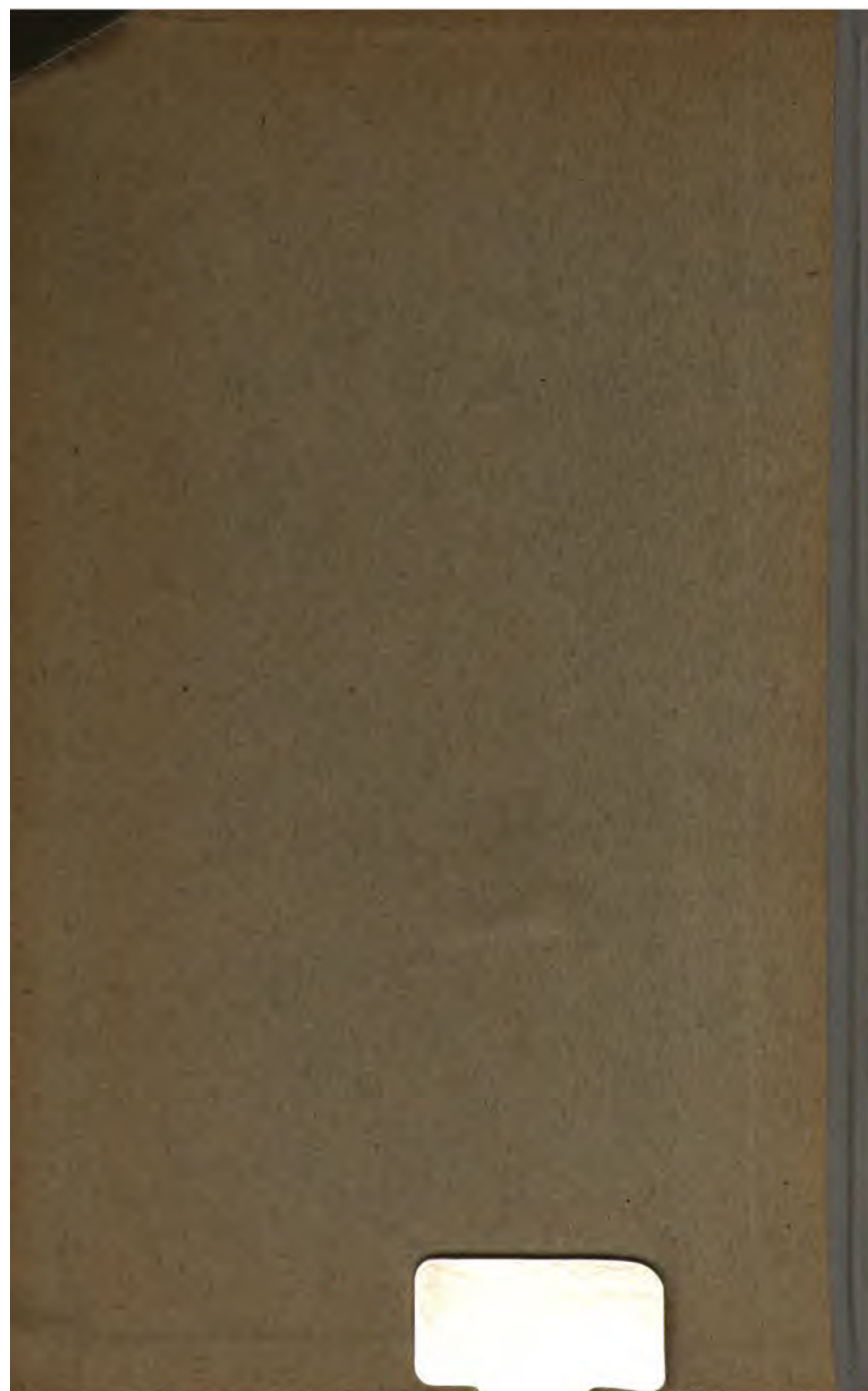
Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

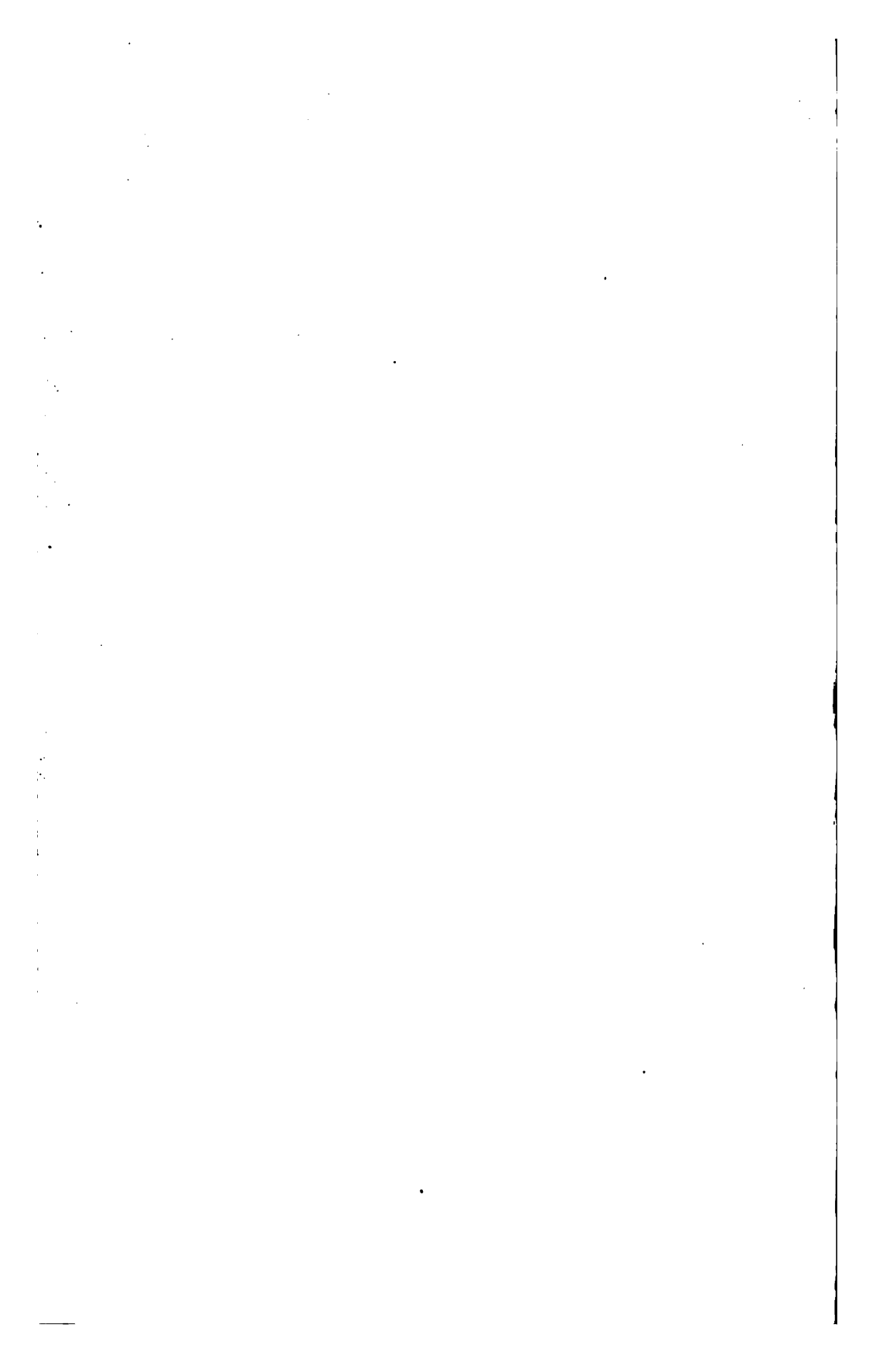
- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

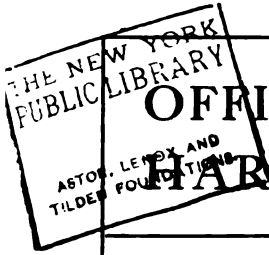


Handwritten text, possibly a signature or date, located in the bottom right corner of the page.



1837
★ L. E. Opdycke

774925



OFFICIAL REGISTER OF HARVARD UNIVERSITY

VOLUME IX

APRIL 2, 1912

NUMBER 8

REPORTS OF THE PRESIDENT AND THE TREASURER OF HARVARD COLLEGE

1910—11



NEW YORK
PUBLIC
LIBRARY

PUBLISHED BY THE UNIVERSITY
CAMBRIDGE, MASS.

3807 WEB
CLUB
YSA.030

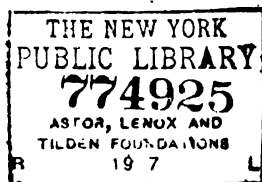
**REPORTS OF THE
PRESIDENT AND THE TREASURER
OF HARVARD COLLEGE**

1910—11



NEW YORK
PUBLIC
LIBRARY

**CAMBRIDGE
PUBLISHED BY THE UNIVERSITY
1912**

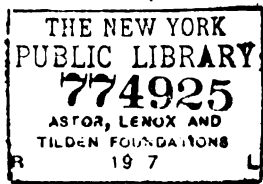


ROY WEN
CLUB
YSAOBU

CONTENTS

	PAGES
PRESIDENT'S REPORT	5-29
REPORTS OF DEPARTMENTS:—	
THE FACULTY OF ARTS AND SCIENCES	31-76
THE COLLEGE	77-82
ATHLETIC SPORTS	83-87
THE GRADUATE SCHOOL OF ARTS AND SCIENCES	88-105
THE GRADUATE SCHOOL OF APPLIED SCIENCE	106-111
THE GRADUATE SCHOOL OF BUSINESS ADMINISTRATION	112-121
THE DIVINITY SCHOOL	122-129
THE LAW SCHOOL	130-135
THE FACULTY OF MEDICINE	136-138
THE MEDICAL SCHOOL	139-150
THE DENTAL SCHOOL	151-158
THE LIBRARY	159-169
APPLETON CHAPEL AND PHILLIPS BROOKS HOUSE	170-172
THE GRAY HERBARIUM	173-177
THE BOTANIC GARDEN	178-184
THE BOTANICAL MUSEUM	185, 186
THE ARNOLD ARBORETUM	187-189
THE CHEMICAL LABORATORY	190, 191
THE JEFFERSON PHYSICAL LABORATORY	192, 193
THE PSYCHOLOGICAL LABORATORY	194-196
THE OBSERVATORY	197-203
THE MUSEUM OF COMPARATIVE ZOOLOGY	204-212
THE ZOOLOGICAL LABORATORY	213-215
THE MINERALOGICAL MUSEUM AND LABORATORIES OF MINERALOGY AND PETROGRAPHY	216
THE PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY AND ETHNOLOGY	217-223
THE SEMITIC MUSEUM	224, 225
THE FOGG ART MUSEUM	226-229
THE GERMANIC MUSEUM	230-232
PUBLICATION OFFICE	233, 234
UNIVERSITY EXTENSION	235-243
RADCLIFFE COLLEGE	244-249
APPENDIX	250-266
INDEX	267-271

TREASURER'S STATEMENT



ROY W. C. M.
J. L. B. N.
V. A. S. B. L.

CONTENTS

	PAGES
PRESIDENT'S REPORT	5-29
REPORTS OF DEPARTMENTS:—	
THE FACULTY OF ARTS AND SCIENCES	31-76
THE COLLEGE	77-82
ATHLETIC SPORTS	83-87
THE GRADUATE SCHOOL OF ARTS AND SCIENCES	88-105
THE GRADUATE SCHOOL OF APPLIED SCIENCE	106-111
THE GRADUATE SCHOOL OF BUSINESS ADMINISTRATION	112-121
THE DIVINITY SCHOOL	122-129
THE LAW SCHOOL	130-135
THE FACULTY OF MEDICINE	136-138
THE MEDICAL SCHOOL	139-150
THE DENTAL SCHOOL	151-158
THE LIBRARY	159-169
APPLETON CHAPEL AND PHILLIPS BROOKS HOUSE	170-172
THE GRAY HERBARIUM	173-177
THE BOTANIC GARDEN	178-184
THE BOTANICAL MUSEUM	185, 186
THE ARNOLD ARBORETUM	187-189
THE CHEMICAL LABORATORY	190, 191
THE JEFFERSON PHYSICAL LABORATORY	192, 193
THE PSYCHOLOGICAL LABORATORY	194-196
THE OBSERVATORY	197-203
THE MUSEUM OF COMPARATIVE ZOOLOGY	204-212
THE ZOOLOGICAL LABORATORY	213-215
THE MINERALOGICAL MUSEUM AND LABORATORIES OF MINERALOGY AND PETROGRAPHY	216
THE PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY AND ETHNOLOGY	217-223
THE SEMITIC MUSEUM	224, 225
THE FOGG ART MUSEUM	226-229
THE GERMANIC MUSEUM	230-232
PUBLICATION OFFICE	233, 234
UNIVERSITY EXTENSION	235-243
RADCLIFFE COLLEGE	244-249
APPENDIX	250-266
INDEX	267-271

TREASURER'S STATEMENT

PRESIDENT'S REPORT FOR 1910-11

TO THE BOARD OF OVERSEERS:—

The President of the University has the honor to submit the following report for the academic year 1910-11:—

At the close of this academic year Dr. Thomas Dwight died, having borne a prolonged illness with conspicuous courage. With the exception of a single year he had been on the instructing staff of the Medical School continuously since 1872, and since 1883 as Parkman Professor of Anatomy. Following Dr. Oliver Wendell Holmes, who had held this position for thirty-five years, he held it for twenty-eight, and during that time he rendered great service to the School as instructor and investigator. The University has also lost by death Dr. Walter Remsen Brinckerhoff, who had recently been appointed Assistant Professor of Pathology after a devoted mission as Director of the Leper Colony at Molokai; Mr. Thomas Hall, who kept up his teaching in spite of growing blindness; and Dr. Ray Madding McConnell, who had been doing excellent work as Instructor in Social Ethics. It has lost by retirement Professor Silas Marcus Macvane, who began as Instructor in Political Economy in 1875, became Instructor in History in 1878, Assistant Professor of the same subject in 1883, Professor in 1886, and finally, in 1887, McLean Professor of Ancient and Modern History; Dr. John Templeton Bowen, who to the regret of his colleagues in the Medical School was constrained by his health to resign his professorship of Dermatology; and Frederick Caesar de Sumichrast, who retired from his associate professorship of French after teaching thirty-four years.

Some of the recent changes in the regulations of the College that went into operation for the first time during the past academic year, have begun to show their effects. The one with which a student is brought earliest into contact is the new requirement for admission. The reasons for a change in this matter were set

forth in the last annual report; but since those reasons were based not so much on dissatisfaction with the old examinations in the cases of those boys who were prepared for them, as on the barrier they erected against boys from good schools over the country which do not direct their chief attention to preparation for these examinations, the new requirement has been set up only as an alternative to the old one. The two stand, and probably will long stand, side by side. Nevertheless, the new requirement differs essentially from the other in character and in aim. The old examinations are designed to test all the secondary school work done, and can be taken a few at a time, an examination being passed on each piece of work when completed. The system is one of checking off studies and accumulating credits. The new requirement is an attempt to measure, not the quantity of work done, but the intellectual state of the boy; a certificate being accepted for the quantity of his school work, and examinations being held on sample subjects to test the quality of his scholarship. The regulations in full will be found in an appendix to this report (p. 25), but the main outlines of the system may be briefly pointed out. To be admitted to examination the boy must present a statement from his school of the studies he has pursued, and these must be the content of a good secondary school course devoted mainly to academic subjects. Four subjects must then be offered for examination, and must be offered at the same time. One of them must be English; another must be Latin or Greek, if the student is to be a candidate for the degree of Bachelor of Arts, but may be a modern language in the case of a candidate for the degree of Bachelor of Science; the third must be Mathematics, or Physics or Chemistry (the reason for the option being the difficulty that some intelligent boys find in doing themselves justice in an examination in Mathematics); and the fourth may be any subject of an academic character, not already offered, that the boy may select. As these are sample examinations covering subjects which are of primary importance or in which the candidate feels most confidence, they must be passed well. But it must be borne in mind that the object is to discover whether the boy is fit for college work, not to measure his proficiency in particular studies.

Information about the new requirement was sent out freely; yet the plan was new, untried, and formulated only a few

months before the June examinations, and under such conditions the number and geographical distribution of the applicants was highly encouraging. Of these there were in all, in June and September, 185, of whom 46 were discarded by reason of defective school records, — for the most part because they had pursued no subject consecutively. The remaining 139 were allowed to take the examinations; and of these 83 were admitted and 56, or 40.2 per cent, were rejected; while of the boys who presented themselves for final examination under the old plan 17.1 per cent were rejected, and 8.1 per cent of the June candidates did not reappear to complete their examinations in September. It had been supposed by some people not connected with the University that the new plan would be virtually a form of admission by certificate, in which examination would play a subordinate part, and hence would mean a letting down of the bars; but the result of the first experiment has dispelled that impression. In fact, four of the candidates who failed under the new system in June tried the old one with success in September; while only one succeeded in a second assault upon the new examinations. The masters of the regular preparatory schools seem now inclined to offer only their best pupils under the new plan. A boy, indeed, whose capacity to enter is doubtful would be wise in trying the old plan, for he has thus a larger chance of being admitted, although with conditions; whereas a boy who is sure to get in will do better to adopt the new plan and come in without conditions, which are always a handicap in college.

One of the chief objects of the new plan, as already observed, was to open the road to Harvard College to the pupils from good schools, and more particularly from good public schools, throughout the nation. In this respect, also, the figures are gratifying. Of the students entering under the old plan in June and September, 1911, 72 per cent were prepared in Massachusetts, 85 per cent in schools in New England, only 8.5 per cent in schools in the other Atlantic states, and only 4.5 per cent in schools west of the Alleghanies. Whereas of those admitted at the same time under the new plan only 41 per cent came from schools in Massachusetts, 47 per cent from schools in New England, while over 31 per cent came from schools in the other Atlantic states, and 21 per cent from those west of the Alleghanies; there being represented twelve

states from whose schools no boy was admitted under the old plan.

The comparison of public with private or endowed schools (including therein private tutors) is not less striking. Under the old plan the public schools sent 46 per cent of the candidates admitted. Under the new plan they sent 84 per cent. With such conditions in regard to the situation and character of the schools from which they come, it might be supposed that the greater part of the boys admitted under the new plan would offer a modern language in place of Latin. But although the boys who do so form a larger proportion under the new plan than under the old one, they are still a small minority. They were 6.5 per cent under the old plan and 20.5 per cent under the new.

As yet the new plan has not been in operation long enough to forecast its final effects. That it is perfect no one would assert, but that on the first trial it gives evidence of fulfilling the objects for which it was designed can hardly be denied. The difficulty in its application comes in the preparation of examination papers that will test the quality of scholarship acquired rather than the quantity of ground covered. The art of examining demands experience, and adjustment to a change of aim requires time, but continued improvement will certainly come with practice. That the new plan brings within reach of Harvard College boys from schools which had hitherto not sent them seems certain, and it is not less clear that this result has been attained without lowering the standard of admission. Whether in scholarly qualities the students entering by the new method will be better or not so good as those admitted under the old plan remains to be seen; but that they are far from indolent, or handicapped at the outset, is proved by the fact that not a single one of the eighty-three was put on probation for low marks at the examinations in November, 1911.

Another change which has gone into effect during the past year is the new regulation for the choice of electives in college. This was first applied to the class that entered in September, 1910. Its members were called upon in the spring of their Freshman year to outline a plan for the remainder of their college course in

accordance with the rule requiring both concentration and distribution of studies. In particular they were required to designate their subject of concentration and to select three, at least, of the courses to be taken in the following year. This they did after consultation with a member of the Faculty or an instructor, each of these advisers having under his charge, as a rule, only four members of the class. To ensure that the choices complied with the rules, or to prepare requests that an exception be allowed by the Committee on the Choice of Electives, the plans were all submitted to Professor Charles P. Parker, the Secretary of the Committee, to whom the success in administering the system has been mainly due.

The rules have worked with little friction, because they appear to supply for most men a good basis for planning a college course of study; and the cases of failure to submit valid plans were generally the result of a misunderstanding of some kind. The requests also for exceptional treatment were not numerous and almost always fell into one of two classes: first, those of men who desired to concentrate in an eminently proper subject, — such as Biology, — which is not included in a single existing department or regular field for a degree with distinction. These were of course allowed. Second, those of men who wanted to avoid any real concentration by taking almost exclusively elementary studies in many fields. These were clear violations of the essential principle of the rules and were refused. More numerous were the requests in the autumn to change single courses selected in the spring for the coming year. Such requests are natural at the outset of a new system, and they were generally granted, unless the obvious motive was to take easy courses.

It may be interesting to note the number of men concentrating their work in the different departments; for while the result is no surprise to persons familiar with the choice of electives by students in recent years, it displays their preferences in an unusually vivid way. The following table, taken from Professor Parker's article in the *Harvard Graduates' Magazine*, shows for each department, or field of distinction, in one column the number of men who have selected it as the object of concentration, and in a second column the number of men who, while concentrating elsewhere, have announced their intention of taking two

or more courses therein. This second column includes only a part of the men who will ultimately take two or more courses in a department outside of their main field, because they are by no means obliged to choose all their electives at so early a stage in their college career; yet it may serve as an indication of the trend of student thought.

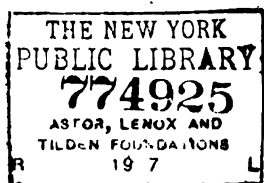
CHOICE OF SUBJECTS BY CLASS OF 1914

Department	Concentration (4 or more courses)	Distribution (2 or 3 courses)
Romance Languages	45	41
English	42	22
The Classics	12	4
Germanic Languages	9	30
Comparative Literature	3	2
History and Literature	9	..
Fine Arts	12	2
Music	9	10
Architecture	6	..
Inadequately expressed as "modern languages" or "Group 1"	9	..
Total, Group 1	156	
Engineering	55	4
Chemistry	38	13
Biology	14	..
Geology	5	3
Physics	4	2
Too vaguely expressed as "Group 2" or "Natural Sciences"	2	..
Anthropology	1	1
Total, Group 2	119	
Economics	133	39
History	41	6
Government	25	9
Too vaguely expressed as "History and Political Science," or more vaguely	33	..
Total, Group 3	232	
Mathematics	9	34
Philosophy	3	84
Total, Group 4	12	

Percentages of Concentration

Language, Literature, Fine Arts, Music	30%
Natural Sciences	23%
History, Economics, Government	45%
Philosophy and Mathematics	2%

It will be observed that much the largest number of choices are in the group of History and Economics, nearly one-half of the students selecting this group; and that of the single departments by far the most popular is Economics, which attracts more than a quarter of all the men in the class. This is in accord with the tendency of public thought at the present day. The next largest group is that of Language and Literature, the choices being chiefly, and in about equal number, in English and the Romance Languages. The group of the Natural Sciences is the third in size, but of the men concentrating in this field nearly one-half are really beginning in college to study their profession of Engineering; and, except for Chemistry, no other subject attracts a considerable number of students. The men who concentrate in the fourth group are few, and in fact the neglect of both Classics and Mathematics as the principal fields of a college education is as marked as it is deplorable; the former subject appealing to only a little more than two per cent and the latter to an even smaller proportion of the members of the class. It may be noted, however, that as a secondary study Mathematics has a much larger following, and this is even more the case with Philosophy, which has far the largest number in the second column, — a number larger indeed than any figure in the first column except for the case of Economics. The figures in the second column are decidedly significant; although it must be borne in mind that even the two columns taken together fail to express either the total number of students or the amount of instruction given in the different subjects; for almost every man takes in some department a single course, which this table does not show, and often before graduation will take more. It will be interesting to examine hereafter the choice of courses when the class has completed its college work; and it will be instructive to collate the courses chosen with the careers that the men embrace, for it will throw light on their motives for the choice. The selection of college studies by undergraduates may not always



ROY W. M.
CLUB
Y. A. S. L.

CONTENTS

	PAGES
PRESIDENT'S REPORT	5-29
REPORTS OF DEPARTMENTS:—	
THE FACULTY OF ARTS AND SCIENCES	31-76
THE COLLEGE	77-82
ATHLETIC SPORTS	83-87
THE GRADUATE SCHOOL OF ARTS AND SCIENCES	88-105
THE GRADUATE SCHOOL OF APPLIED SCIENCE	106-111
THE GRADUATE SCHOOL OF BUSINESS ADMINISTRATION	112-121
THE DIVINITY SCHOOL	122-129
THE LAW SCHOOL	130-135
THE FACULTY OF MEDICINE	136-138
THE MEDICAL SCHOOL	139-150
THE DENTAL SCHOOL	151-158
THE LIBRARY	159-169
APPLETON CHAPEL AND PHILLIPS BROOKS HOUSE	170-172
THE GRAY HERBARIUM	173-177
THE BOTANIC GARDEN	178-184
THE BOTANICAL MUSEUM	185, 186
THE ARNOLD ARBORETUM	187-189
THE CHEMICAL LABORATORY	190, 191
THE JEFFERSON PHYSICAL LABORATORY	192, 193
THE PSYCHOLOGICAL LABORATORY	194-196
THE OBSERVATORY	197-203
THE MUSEUM OF COMPARATIVE ZOÖLOGY	204-212
THE ZOÖLOGICAL LABORATORY	213-215
THE MINERALOGICAL MUSEUM AND LABORATORIES OF MINERALOGY AND PETROGRAPHY	216
THE PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY AND ETHNOLOGY	217-223
THE SEMITIC MUSEUM	224, 225
THE FOGG ART MUSEUM	226-229
THE GERMANIC MUSEUM	230-232
PUBLICATION OFFICE	233, 234
UNIVERSITY EXTENSION	235-243
RADCLIFFE COLLEGE	244-249
APPENDIX	250-266
INDEX	267-271

TREASURER'S STATEMENT

be judicious, but in most cases the choice of the main field, at least, is serious. As Professor Parker says, "No wise body of teachers can afford to disregard the states of mind in which young men approach instruction. Wherever we wish to lead them we must begin where they are."

A third change which went into effect during the year is that of requiring every student before he is registered as a Junior to be able to read ordinary French or German. It has been applied for the first time to the Class of 1914, and in view of the fact that each student had already been required to pass an entrance examination, or take a college course, in both languages, the results are striking. The members of the class have had four opportunities to present themselves for the oral examination — in October, 1910, and in February, June, and October, 1911. Among the five hundred and nineteen students who entered the Freshman class in 1910, three hundred and ninety-nine attempts have been made to pass the French examination, and about half as many to pass the German.¹ In each case almost precisely one-half have failed, so that out of the five hundred and nineteen who entered college in September, 1910, only two hundred and one had shown an ability to read either French or German by Christmas of the next year.

Such a result is the best proof that an examination of this kind was needed. It shows how insufficient is the entrance examination, or the requirement of a college course, to secure an ordinary reading knowledge of a language; yet it is clear that at the present day almost no subject can be properly pursued, to the extent to which it must be pursued in college by any student who concentrates his six courses therein, without a fair reading knowledge of at least one modern language. Many of the students who fail in the oral examination have nevertheless reached the point where with a little serious effort, a little persistent practice by themselves, they could read with reasonable accuracy and fluency; and when experience of the new examinations has impressed the need of attaining that proficiency, they will no doubt profit more by the existing instruction. In the meanwhile it is proposed

¹ The figures are given in this way because some men have tried more than once.

to offer special summer courses, which will not count for a degree, but will be devoted to preparation for the oral examinations by practice in reading the language.

The efforts of the students, encouraged in every possible way by the College authorities, to promote solidarity among themselves, to prevent the student body from being divided into exclusive groups, to make the College, in the common use of the term, more democratic, have had a notable growth. One of the most palpable signs of this, initiated by the students, is the practice on the part of the Seniors of getting together for their final year in the College Yard. This was mentioned in the report of last year, and it has been continued to an even larger extent, the Seniors filling substantially all the rooms in Hollis, Stoughton, Holworthy, and Thayer. For this purpose the steam heat and new plumbing were extended to the south entry of Thayer, and during the summer just passed Holworthy has been wholly refitted with new plumbing; so that all the dormitories at the north end of the Yard are now provided with shower baths, and all except a part of Holworthy with steam heat.

Another means of bringing students together is found in the dining halls. The habit that has grown up among them of late years of taking their meals sporadically in different places without constant companions is unfortunate. Men would not be social creatures if they were not gregarious at meals. Moreover, it is doubtful whether proper food would be provided at a moderate price for so great a number of students if dining halls were not maintained by the University, and this cannot be done unless the students come in large numbers. But the problem is not altogether simple, for the students tend to weary of the monotony of a big dining hall as the months go by; and it is therefore satisfactory to find that both Memorial and Randall Halls were fairly well filled during the year and that both earned more than their running expenses. At Memorial the average membership was 681, and 447,513 meals were served; while at Randall, where the payments are not made by the week, and hence there is no registration, 433,829 meals were served. Memorial earned the interest on its debt for improvements and equipment and a small balance toward the sinking fund; Randall substantially the

whole of its interest and sinking fund. In order to be able to improve the supply of food without increasing the price of board, the Corporation has determined to remit all charges upon Memorial Hall for interest and sinking fund above the sum of four thousand dollars a year.

In Appleton Chapel, the Sunday morning service, which began in January, 1910, has been continued throughout the past year with gratifying results. The average attendance of students increased from 146 in 1908-09, and 151 in 1909-10, to 244 in 1910-11. Perhaps even more significant is the growth of their minimum attendance from 40 in 1908-09, and 50 in 1909-10, to 104 in 1910-11, while the churches in the neighborhood report that the presence of students at their services has not materially diminished. The attendance at the Chapel of persons other than students has changed very little, but it is composed in far larger part of members of the Faculty and their families. In short, the Chapel is becoming what it ought to be, a real university chapel, and this fact impresses anyone who attends the services.

For the graduate and professional schools the year has been one of progress. The reports of the various Deans explain the condition of these schools, and it is necessary here to allude only to the changes made during the year, or to matters where comment may be of general interest. Attention is called to the report of the Dean of the Graduate School of Arts and Sciences, and especially to his statement of the benefits that might flow from research fellowships which would enable and induce a few young men of rare original power to devote some of their most creative years to work that may bear fruit in enlarging the bounds of knowledge, instead of consuming most of their energy in teaching when others with different gifts could do that as well, or better, than they. Such fellowships might be in part honorary, and should all be highly honorable, for the time has come in America when creative scholarship should attract ambitious youth as strongly as other kinds of activity. That the desire to advance human knowledge should be so largely confined among college graduates to men who must use it as a means of support is not wholly creditable to our universities. Of John Harvard

Fellowships without stipend awarded to scholars of high grade there were last year three among the travelling fellows, but not a single one among the resident students in the Graduate School of Arts and Sciences. Almost every career in life must be pursued mainly by persons who obtain their livelihood thereby, but above all else knowledge of the mysteries of nature and of man ought to attract a few men solely by its charm and its boundless possibilities.

The Graduate School of Applied Science has had notable additions during the year. The Department of Architecture has been strengthened by the coming of M. Eugène Joseph Armand Duquesne as Professor of Design; and a new Department of Sanitary Engineering has been created by the appointment of Professor George Chandler Whipple, who will take up his work in the course of this year. The new department touches on one side the instruction in Engineering in this School, and on the other the Department of Preventive Medicine in the Medical School. The number of students may not be large at the outset, but the instruction will supply a rapidly growing need in the community.

In the Law School the fourth-year course, leading to the degree of *Scientiae Iuridicae Doctor*, was opened during the year, with a small number of students. There was neither expectation nor desire that they should be numerous, for the additional year is not designed for men who intend to devote themselves to practising the art of the profession. The regular three years' course serves that purpose, and experience has proved its excellence in attaining its object; but the province of a law school extends also to the production of jurists who will advance legal thought, and the fourth year is established with that view. Men of this kind will always be few, and quality, not numbers, is the criterion of the value of the course.

In the Medical School the changes during the year have been noteworthy. Here also an additional year of work leading to a new degree went into effect. Eight students were registered in the graduate course in Preventive Medicine, of whom two

completed the work and received the new degree of Doctor of Public Health.

The greatest need of the School has been a closer connection with the hospitals of the city, and marked progress in this direction has been made. The construction of the Peter Bent Brigham Hospital, adjoining the Medical School, was begun during the past summer and the building is expected to be finished and ready for patients in the autumn of 1912. By an understanding with the Hospital its chief physician and surgeon are nominated to the Trustees by the Corporation of Harvard University, and the subordinate medical officers are to be nominated by these chiefs. Similar arrangements have been made with the Children's Hospital, the Infant Asylum, and the Infants' Hospital, and the same practice has been followed in the Free Hospital for Women and the Infants' Department of the Boston Dispensary, while the Collis P. Huntington Memorial Hospital for Cancer is intimately associated with the School. It cannot be repeated too often that the object of these agreements is not to subordinate the hospital to the Medical School, but to promote the interest both of the School and of the patients through a joint appointment by the two institutions. This will make it possible to secure the best medical talent by combining a chair in the School and a clinic in the hospital.

During the year the Faculty discussed a radical change in the process of examination leading to the degree of Doctor of Medicine. Hitherto the degree has been conferred upon the completion of a fixed number of courses, those in the first three years being required and those of the fourth year elective; and, since the intensive method is pursued, the student, in the earlier part of his course at least, devoted his whole energies for a certain length of time to a single subject, passed an examination upon it, and bade it farewell. Complaint was made that the system was inelastic, lacking in stimulation; and that the student might graduate without retaining sufficient knowledge, without coördinating it, and without inducement to review it. In the spring of 1910, a committee was appointed to consider means of lessening the rigidity of the medical curriculum. Members of the committee examined carefully the system prevailing in American medical schools of granting the degree upon an accumula-

tion of credits in separate courses, required or elective, and the European system of holding general examinations, first upon the general scientific or laboratory subjects, and later upon the clinical branches. The committee was convinced that the latter plan afforded a better test of medical preparation, gave to the student more latitude in his work, and directed his attention more to acquiring a thorough command of medical science. It reported, therefore, in favor of two general examinations, partly practical, partly oral, and partly written, designed to measure the student's comprehension, judgment and skill, rather than to test his detailed information; the first examination to cover the laboratory subjects taught in the first year and a half, the second to cover the clinical subjects studied later, the examination in special courses to be retained only for the purpose of certifying that the student has completed the courses required and can be allowed to present himself for the general examination.

The essential principles in the report of the committee were adopted provisionally by the Faculty on March 4, and another committee, composed mainly of different members, was appointed to consider a practical method of giving effect to the plan. The second committee modified the plan in some respects and carried it into far greater detail. It was then discussed both by the Faculty Council and the Faculty, and finally adopted in October, 1911. In its complete form it will be found in an appendix to this report (p. 26).

General examinations of this character involve a marked departure from the prevalent American system of counting points and accumulating credits by examinations passed in separate courses. It will be observed that they are based upon the same principle as the new plan for entrance and the oral examinations in reading French and German already introduced in the College; and their possible application is by no means limited to the Medical School. Examinations are in all cases defective instruments. In a primitive golden age, if a college consisted of a log with the president on one end and the student on the other, examinations might perhaps be dispensed with altogether, but in an institution of any size they are a necessity, and where they exist their character and scope will inevitably determine in large measure the attitude of the student toward his studies. If he obtains his degree by

passing examinations in separate courses, each course will be to a great extent an end in itself; whereas if he must look forward to a general examination in the future, the course becomes a means to an end, a part of a larger whole. The difference is even more marked where the courses are elective than where they are required, because in scoring points toward graduation the indolent student is tempted to select courses which require little work, and is attracted therefore to those which cover ground already in part traversed; whereas, if he is preparing for a general examination, he is drawn to choose those which will give him the knowledge he will require. The value of any general examination must depend upon the skill with which it is administered; and that skill can be attained thoroughly only by experience. The art of conducting examinations is not less difficult and worthy of cultivation than the art of passing them; and in the Medical School the organization of committees for the purpose seems to promise good results. Among other things it makes abundant provision for a matter vital to a general examination upon a subject, as distinguished from an examination upon a course; to wit, that the majority of the examiners in any subject shall not be the persons who have given the student his instruction therein. In order, indeed, to avoid a narrow and technical aim, the rules go so far as to require that on each examining board for the oral examinations on a laboratory subject, there shall be a representative of the clinical subjects, and *vice versa*. No doubt time will be needed to perfect the system, but well administered it can hardly fail to promote a thorough mastery of the essentials in a medical education.

The adoption of the principle of a general examination upon subjects, instead of scoring credits in particular courses, is also under consideration in the Divinity School, both for the ordinary degree of Bachelor of Divinity and for an advanced degree of Master of Divinity. The students in that School are not numerous, and their number is far less important than that the School should maintain for its degree a standard which shall be universally recognized as both high and rigorously enforced.

The Divinity School has been strengthened during the year by the accession of Professor James Richard Jewett to a chair

of Arabic; and its equipment has been enriched by the joint Andover-Harvard Library built by Andover Theological Seminary. To this the theological books of both schools have been transferred. As the great collections of books at Harvard and in other libraries in this neighborhood become larger, the difficulty and the importance of avoiding needless duplication, and of making the collections readily accessible to all persons who can profit by them, increase year by year, and give scope for the energy and tact of the Director of the University Library.

The organization of the extension work of the University under a Dean and Administrative Board, the coöperation therein, save for the Summer School, of the other institutions of higher learning in and about Boston, and the establishment of a special degree for students in these courses, were described in the last annual report. For the work done during the past year the reader is referred to the report of the Dean, but a few words may be said here about the general policy involved. The development of the great state universities in the West, and their success in meeting the needs of the communities by which they are maintained, have thrown a new light upon the functions of a seat of learning. Too sharp a distinction is sometimes drawn between the endowed universities and those supported by the state. The fact that the former are neither directed by the public authorities, nor maintained by public funds, does not relieve them from the duty of serving the public. They are public institutions, the crown of the educational system, and although their first duty is to give the highest education possible to all men, rich and poor, who are capable of profiting by it, they can, and should, give aid to those who seek instruction but are unable to abandon their occupations to enter the regular curricula. This need not involve any lowering of the standard, for what the people should desire is not degrees cheaply obtained, but the best of instruction and a means of measuring their progress by the regular college standards strictly maintained. Harvard has had an unfortunate reputation of being a rich man's college, and undeservedly, for a very large percentage of the students are obliged to earn money to pay their way, or to seek scholarships or aid from loan funds. It has had the reputation also of being exclusive, of holding aloof

from the mass of men. This impression we must seek to remove until every man in the community in which we stand feels that he has a potential stake in the University, is proud of it, and takes an interest in its welfare.

The University has no funds directly applicable to extension work. The Summer School is now self-supporting, but the public courses in term time must be carried on at a loss. The Boston Chamber of Commerce has given some help, while the Lowell Institute, of which the writer happens to be the trustee, defrays the greater part of the expenses not covered by students' fees. The founder directed that a part of his lectures should be popular and others "more erudite and particular." In fact, he seems to have had in mind what we now call university extension, but he did not realize how difficult it would be in this country to give effect to his project save by a close connection with a college. This portion of his design is now carried out by means of a coöperation with institutions of college rank in this neighborhood, partly through the extension work organized under the joint committee described in the last annual report, and partly in other ways. Unfortunately, perhaps, John Lowell, Jr., limited the fee in his courses to the price of two bushels of wheat per term, but if this limits the resources of the extension teaching, it provides the public with instruction of high grade at a very low cost to the student.

Under the arrangement for an exchange of professors with Germany we had the benefit during the first half-year of Professor Max Friedländer of Berlin, whose courses and public lectures on music will be long remembered. At the request of the Prussian Government, Professor Hugo Münsterberg was sent in return to Berlin.

For a number of years Mr. James Hazen Hyde maintained at his own expense an exchange with France whereby an American professor lectured at the French universities for half a year, and a Frenchman delivered a course of public lectures at Harvard. Last year President John H. Finley, of the College of the City of New York, was sent to France, and Professor Emile Boutroux, the eminent head of the *Fondation Thiers*, lectured here. The interchange has been highly profitable, but it was felt that it would

be better still if we could obtain a French professor who would give regular instruction in the University for a half-year. The French government accepted the proposal cordially, and an agreement was made for a biennial exchange of professors. Such an exchange will be of great value in bringing our students into close contact with the rich scholarship of contemporary France.

An affiliation has been made also with a number of the best colleges in the West, and it has been made on their initiative. They are academic descendants of the old New England colleges, and do not attempt to maintain professional or graduate departments, but have a firm faith in the merits of a four-year college education. They find themselves pressed by the competition of the western state universities, which have far larger resources, and offer the attractions of the so-called "combined degree" whereby one or two years of study in the professional school of the university is treated as equivalent to college work, and is credited toward the degree of Bachelor of Arts as well as toward the professional degree. By that process a student obtains both degrees in a shorter period than if he completed his college work before entering upon the study of his profession. This is not the place to discuss the merits and defects of such a telescoping of curricula. It is a distinct advance over admission to the professional schools without any college work; but, on the other hand, the education it furnishes is unquestionably less than that of a full college course followed by a full professional course. No doubt it will appeal strongly to the greater part of American young men; but there are many others who prefer to obtain the more complete education. Nevertheless, it places these western colleges at a disadvantage, because the man who takes their full course must spend a year or two longer before he can practice his profession; and they turned their thoughts to Harvard as almost the only university which does not permit the taking of a combined degree. The colleges included at present are Knox in Illinois, Beloit in Wisconsin, Grinnell in Iowa, and Colorado College. Harvard is annually to send one of its professors for a half-year, who will spend a month at each of the colleges, giving regular instruction to the students; and each college may send to Cambridge for half a year one of its instructors, who will give a third of his time to teaching in the University, and spend the

rest of it in study or research. The colleges are to provide the maintenance and travelling expenses of the visiting professor, and Harvard is to pay each of her visitors the salary of an assistant in a course. The direct advantages of the affiliation are only a part of its object; the indirect benefits are greater still, for the alliance enlarges the influence and usefulness of both institutions.

The friends of the University have as usual been generous, the total amount received in gifts and legacies during the fiscal year ending July 1, 1911, having been \$1,745,438.72. Among the largest separate sums received are: from the estate of Gordon McKay, an additional payment of \$382,377.86; from the estate of Alexander Agassiz, \$201,507.50, partly for the cost of the publications of the Museum of Comparative Zoölogy, and partly for its general expenses; \$141,000 for the construction and maintenance of the Collis P. Huntington Memorial Hospital from subscriptions received through Dr. J. Collins Warren; \$100,000 from the Class of 1886 for its Twenty-fifth Anniversary Fund; \$100,000 from Mr. Adolphus Busch, to be added to his gift for the construction and maintenance of the Germanic Museum; \$92,568.75 to be added to the Anonymous Fund; from the estate of Mrs. Mary Hemenway, \$45,000, for the Mary Hemenway Fund for Archaeology in the Peabody Museum; from the estate of John Harvey Treat, \$40,797.11, for the purchase of books for the Library.

Most of these gifts are restricted to special objects, and in spite of generosity we are in want. By rigid economy, severely felt in some cases, the deficit for the University, College and Library was reduced from \$50,100.88 to \$28,532.84. Economy must be practiced until our resources increase, although several departments are undermanned and should be enlarged if we are to do the work the public properly expects. In many directions we need funds for buildings or endowment.

For the Freshman Dormitories over eleven hundred thousand dollars, including the Smith bequest, has been subscribed, and seven hundred thousand more is required for the buildings and furniture.

The Library is in a deplorable physical condition. We have a magnificent collection of books. It is the greatest treasure

of the University. Much has been done to make it more useful. The classification has been carried forward. The catalogue has been improved, arrears in cataloguing are being made up and cards of standard size are being introduced. But this precious collection is housed in an old building which is not fireproof. For want of space some seventy thousand volumes are stored in the basements of other buildings; more are constantly moved out to make room for accessions; there are no proper places for professors and students to work; and, in brief, if we are not shortly to lose much of the usefulness of this great scholars' library, we must have a large addition to the structure. An excellent plan for a new building has been made by a number of architects employed by the Committee of the Overseers. To build it will cost over two million dollars, and to maintain it the income of a million more. If this sum cannot be raised, at least enough must be secured to begin at once a substantial portion of the work.

The foundations of the research laboratory for physical chemistry have been laid, and it is a pleasure to think that this productive branch of investigation is placed on a satisfactory basis. But it does not relieve the general condition of chemical instruction, for which Boylston Hall is wholly inadequate. The importance of Chemistry to natural science, to health and to industry, has increased rapidly, and its development in the future is measureless; yet we are almost entirely limited to a single building constructed more than half a century ago. If Harvard is not to fall hopelessly behind the times in this branch of science, we need laboratories, which, with the fund for maintenance, will cost a million dollars.

The School of Business Administration was projected with contributions of twenty-five thousand dollars a year for five years; and, since that period comes to an end in 1913, adequate provision must be made for an endowment of the School. It has proved its value and deserves to be put on a permanent foundation.

In order to enable the Medical School to call eminent clinical professors from other parts of the country — which it must do in order to maintain itself as a national institution of the first rank — it needs funds to pay them adequate salaries. More pressing still is the condition of the Dental School. The new building

is admirable, and the number of students has increased largely. The operating rooms provide a dental hospital in which great numbers of patients are treated, and the importance of this work to public health is being more and more recognized. The building has been erected by the efforts of the staff, and in order to place the School where it stands, the clinical instructors have for years foregone their salaries altogether; but it is neither just nor possible that this should continue longer, and to resume the payment of salaries an endowment of at least five hundred thousand dollars is required.

These are only the most obvious and pressing needs of the University. There are others only less urgent. If they appear large, it is because the usefulness of the University in its existing fields of work is great. With improvements in equipment, the expense of all effective instruction has increased, and this is multiplied by the growing cost of everything. It is no mere spirit of rivalry with others, but a desire to serve the country in the best way that compels a statement of our lack of resources.

The following reports by the Deans, the Directors of Laboratories, and the heads of other branches of work are respectfully referred to the Overseers.

A. LAWRENCE LOWELL, *President*.

CAMBRIDGE, January 25, 1912.

APPENDIX TO PRESIDENT'S REPORT

I

REQUIREMENTS FOR ADMISSION TO HARVARD COLLEGE WITHOUT COMPLETE EXAMINATION

A. EVIDENCE OF THE COMPLETION OF AN APPROVED SECONDARY SCHOOL COURSE

1. *Tabulated Statement*

A candidate shall present to the Committee appointed to administer this plan evidence as to his secondary school work in the form of an official detailed statement showing: —

- (a) The subjects studied by him and the ground covered.
- (b) The amount of time devoted to each.
- (c) The quality of his work in each subject.

2. *Approved School Course*

An "approved secondary school course" must

- (a) extend over four years,
- (b) concern itself chiefly with languages, science, mathematics, and history.

No one of these four subjects may be omitted.

At least two studies of a school programme must be carried to the stage required by the present advanced examinations of Harvard College, or by the equivalent examinations of the College Entrance Examination Board.

B. EXAMINATION IN FOUR SUBJECTS

1. *Subjects*

A candidate who presents evidence that he has satisfactorily completed an "approved secondary school course" shall offer himself for examination in the four subjects named below. A satisfactory record in these examinations shall admit to Harvard College without conditions.

- (a) English.
- (b) Latin, or, for candidates for the degree of S.B., French or German.
- (c) Mathematics, or Science (Physics or Chemistry).
- (d) Any subject, not already selected under (b) or (c), from the following list: —

Greek	History	Chemistry
French	Mathematics	Physics
German		

2. The Examination Papers

(a) The preparation presupposed by the examination papers in the several subjects shall not be less than is ordinarily required for the present elementary examinations. The papers shall contain a sufficient number of alternative questions, and shall be so framed as to permit variety in the methods of school instruction. They shall also include advanced questions, thus permitting each student to reveal the full amount and the quality of his attainment. In any subject offered for examination which the candidate has pursued to an advanced grade he must present evidence of that grade of attainment. The papers shall not, however, presuppose a greater length of preparation than is ordinarily required for the present Harvard examinations.

(b) Time of examinations.

The four examinations must be taken at one time, in either June or September.

(c) Judging the examination books.

A copy of the candidate's school record shall be given to the readers of the examinations. In judging the books the examiner shall submit a full statement of his opinion of each book. In addition, at the option of the examiner, a grade may be given.

3. A Satisfactory Record

A "satisfactory record" shall not be construed to require that a candidate attain distinction in all four subjects, but shall mean that in the judgment of the Committee on Admission the candidate's examination record as a whole, when viewed as the basis for a general estimate of his quality, is such as to make his admission to college advisable.

II

EXAMINATIONS IN THE MEDICAL SCHOOL

The Committee appointed to devise a plan for general examinations in the Medical School submits the following report which was adopted without change:—

There shall be a Committee on Examinations, appointed from the Faculty by the President, which shall have full charge of all examinations in M.D. courses in the School.

There shall be two kinds of examinations, general and practical.

A. GENERAL EXAMINATIONS

Two general examinations shall be required of the candidate for the M.D. degree: the first, after the end of the second year; the second, after the completion of the fourth year of medical study.

I. *The First General Examination***(a) Time of Examination.**

The student may choose either June or September for his first general examination.

(b) Requirements for Admission to Examination.

No student shall be admitted to this examination until he has completed all courses included in this examination, and has passed examinations in the practical work thereof.

(c) Subjects of Examination.

The subjects comprised in the first general examination shall be anatomy, histology and embryology, physiology, biological chemistry, pathology, and bacteriology; but this examination shall assume and require an elementary knowledge of physics, inorganic and organic chemistry, and biology.

II. *The Second General Examination***(a) Time of Examination.**

The student may choose either June or January for his second general examination.

(b) Requirements for Admission to Examination.

No student shall be admitted to this examination until he has passed satisfactorily the first general examination, has completed four years of medical study in four different calendar years, including at least one year of resident study at the Harvard Medical School, has completed all courses included in this examination, and has passed examinations in the practical work thereof.

(c) Subjects of Examination.

The subjects comprised in the second general examination shall be preventive medicine and hygiene, materia medica and therapeutics, medicine, surgery, pediatrics, obstetrics, gynecology, dermatology, syphilis, neurology, psychiatry, ophthalmology, otology, and laryngology.

III. *The Character of the General Examinations*

The general examinations shall be partly written and partly oral.

(a) The Written Examination.

The written part of each general examination shall consist of questions selected and arranged by the Committee on Examinations from lists of questions submitted by the departments concerned. The written test shall be divided into two or more parts of three hours each, and shall be given on successive days of the general examination. The examination books shall be read and graded as the Committee on Examinations shall determine, and the grade shall count as forty per cent of the final mark.

(b) *The Oral Examination.*

The oral part of each general examination shall be conducted by examining boards, of five members each, appointed from the teaching staff by the Committee on Examinations. Each board shall have not less than two professors. On each board for the first general examination there shall be one representative of clinical subjects, and at least one representative of each of the following groups: normal structure (anatomy, histology, and embryology), normal function (physiology and biological chemistry), abnormal structure and function (pathology, comparative pathology, and bacteriology). On each board for the second general examination there shall be one representative of the laboratory subjects, and at least one representative of each of the following groups: medicine, surgery. No single department shall have more than one representative on a single board. Any board may request the Committee on Examinations to appoint other members of the teaching staff to aid in conducting the examination.

The oral part of a general examination shall not be held on the same days with the written examination. The oral part of the second general examination shall include the electives taken in the fourth year. The board shall determine by conference and vote the grade of the student, and it shall count as twenty per cent of the final mark.

IV. *Repetition of General Examinations*

No student who has failed to pass a general examination shall be permitted to repeat the examination within the calendar year in which he failed. Any student who fails three times in a general examination shall be debarred from further attempts.

B. PRACTICAL EXAMINATIONS

The practical examinations shall be conducted by the several departments in conference with the Committee on Examinations, and the departments shall give no other examinations which shall count for the degree. These examinations shall be planned to measure the student's practical knowledge and skill, and to this end the second examination shall include a thorough test of the student's capacity in diagnosis and treatment under conditions of actual practice. Every student may choose whether he will take the practical examinations at the end of each course or near the time of the next general examination. In order to be admitted to a general examination the student must have passed all the practical examinations in the subjects of that examination.

Forty per cent of the average percentage grade of each student in the practical examinations shall count in the final mark of each of the general examinations. In estimating the average percentage grade the marks in the practical examinations in medicine and surgery shall each be multiplied by three, in obstetrics and pediatrics each by two, and in the

other departments by one.¹ In departments giving only lectures and demonstrations an oral, instead of a practical, examination shall be held, and the marks counted as if secured in the practical test.

C. ADMISSION TO ADVANCED STANDING

The preceding rules governing general examinations shall be applied to students seeking to enter the Harvard Medical School with advanced standing, as follows: —

Both general examinations including the practical examinations shall be required of every student admitted to the Harvard Medical School, and these examinations, including practical examinations, shall be given under the supervision of the Committee on Examinations as provided above. The requirements for admission to each general examination shall be the same for those entering for advanced standing as for those regularly enrolled in the Harvard Medical School from the beginning of the first year of medical study, except that courses pursued at other recognized medical schools in character and quality equivalent to similar courses in this School will be accepted in place of these courses in this School when satisfactory evidence of having pursued such courses is presented to the Dean. No student shall be admitted to the third year work until he has passed the first general examination, and no student shall be admitted to the second general examination who has not spent at least one year in resident study at the Harvard Medical School.

A graduate of another medical school of recognized standing may obtain the degree of M.D. at this University after a year's study in the undergraduate course, by fulfilling all the requirements for admission to the first and second general examinations, by passing these examinations, by fulfilling all requirements of laboratory and practical work required in the full undergraduate course, and by fulfilling all requirements for admission.

¹ This is in accord with the system at present in vogue in making up the students' general average, by which a subject with a three-hour or a two-hour examination counts proportionately more than one with a one-hour examination.

REPORTS OF DEPARTMENTS

THE FACULTY OF ARTS AND SCIENCES

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—I have the honor of presenting a report on the work of the Faculty of Arts and Sciences for the academic year 1910–11.

Besides the President, the Faculty contained eighty-five Professors, two Associate Professors, sixty Assistant Professors, one Lecturer, eighteen Instructors, the Acting Dean of Harvard College, and the Recorder,—in all, a hundred and sixty-nine members.

Instruction in 1910–11

With the following list of courses of instruction that were actually given under the authority of the Faculty, I print a statement of the number and the classification of the students in each course. The figures are those officially returned to the Recorder by the several instructors at the close of the academic year, and take no account of persons who, regularly or irregularly, attended the exercises and did the work of a course without being officially recognized as members of it. The abbreviations are those ordinarily used in such lists: *Se.*, Senior; *Ju.*, Junior; *So.*, Sophomore; *Fr.*, Freshman; *Sp.*, Special Student; *uC.*, Unclassified; *Gr.*, Graduate School of Arts and Sciences; *G.S.*, Graduate School of Applied Science; *G.B.*, Graduate School of Business Administration; *R.*, Radcliffe; *Di.*, Divinity; *And.*, Andover; *Me.*, Medical School; *Ext.*, Department of University Extension; *Instr.*, Instructor.

COURSES OF INSTRUCTION GIVEN IN 1910–11

Semitic Languages and History

For Undergraduates and Graduates:—

- 1¹. Professor LYON and Dr. DAVEY.—Hebrew. Selections from the prose narratives of the Old Testament. 1 *Se.*, 1 *Ju.*, 2 *So.*, 2 *Fr.*, 2 *Di.* Total 8.
- 2². Professor LYON and Dr. DAVEY.—Hebrew (second course). Syntax. Extensive reading in the Old Testament.
2 *So.*, 2 *Fr.*, 1 *uC.*, 1 *Di.* Total 6.
4. Professor LYON.—History of Israel, political and social, till the capture of Jerusalem by the Romans. 3 *Se.*, 6 *Ju.*, 6 *So.*, 5 *Di.* Total 20.

5. Professor G. F. MOORE. — History of Jewish Literature from the Earliest Times to 200 A.D. 2 Ju., 1 Sp., 4 Di., 4 And. Total 11.
- A6. Professor ARNOLD. — Religion of Israel. History of the religious ideas and institutions of Israel from the earliest times to the Maccabean age. 2 Di., 9 And. Total 11.
- 12 *hf.* Professor LYON. — History of Babylonia and Assyria. 8 Ju., 1 Di. Total 4.

Primarily for Graduates: —

- ‡10. Professor LYON. — Assyrian. 1 Ju. Total 1.
- ‡13. Dr. DAVY. — Arabic. Brünnow's Chrestomathy. 1 Gr., 1 Ju. Total 2.
18. Dr. DAVY. — Classical Aramaic (Syriac). Selections from the Peshitto; Syriac prose of the classical period. 1 Se., 1 Di. Total 2.

COURSES OF RESEARCH

- ‡20a. Professor LYON. — Assyrian: Unpublished inscriptions. 1 Di. Total 1.
- 20b *hf.* Professor G. F. MOORE. — Old Testament: Methods of Historical Investigation, with special reference to the Old Testament. 1 Gr. Total 1.

Egyptology

For Undergraduates and Graduates: —

- 3 *hf.* Asst. Professor REISNER. — History of Egypt. 1 Gr., 14 Se., 20 Ju., 15 So., 2 Fr., 1 Me. Total 53.
- 4 *hf.* Asst. Professor REISNER. — History of Egyptian Art. 1 Gr., 19 Se., 19 Ju., 22 So., 5 Fr., 1 uC., 1 Di. Total 68.

Indic Philology

For Undergraduates and Graduates: —

- 1a *hf.* Professor LANMAN. — Elementary Sanskrit. 1 Se. Total 1.
- 1b *hf.* Professor LANMAN. — Elementary Sanskrit (continued). Hertel's Pancha-tantra. 1 Se. Total 1.

The Classics

Primarily for Undergraduates: —

GREEK

- G. Asst. Professor C. N. JACKSON. — Course for Beginners. 4 Gr., 1 Ju., 8 So., 15 Fr., 3 Sp., 1 uC., 1 And. Total 28.
- A. Dr. K. K. SMITH. — Greek Literature. Homer, Odyssey; Euripides and Aristophanes. 1 Se., 3 So., 6 Fr., 2 uC. Total 12.
- B. Professor GULICK, Asst. Professor C. N. JACKSON, and Dr. POST. — Greek Literature. Plato; Lysias; Elegiac, Iambic, and Lyric Poets; Euripides. 4 So., 27 Fr. Total 31.
- E *hf.* Dr. WEBB. — Greek Prose Composition (first course). 1 Gr., 1 Ju., 5 So., 1 Fr. Total 8.

- 1a ¹/_{hf}. Mr. FORBES. — Greek Literature. The Period of Athenian Supremacy. Herodotus; Aeschylus; Plutarch. 1 Ju., 3 So., 4 Fr., 1 uC. Total 9.
- 1b ¹/_{hf}. Dr. POST. — Greek Literature. The Period of Athenian Supremacy. Thucydides; Aristophanes; Sophocles. 1 Se., 3 So., 3 Fr., 1 uC. Total 8.
2. Professor CLIFFORD H. MOORE and Associate Professor C. P. PARKER. — Greek Literature. Aristophanes; Thucydides; Aeschylus; Sophocles. 1 Gr., 10 So. Total 11.
- 3 ¹/_{hf}. Asst. Professor C. N. JACKSON. — Greek Prose Composition (second course). 1 Gr., 1 Ju., 4 So. Total 6.

LATIN

- A. Mr. MILLER. — Cicero (selected speeches). Virgil. 1 Ju., 1 So., 7 Fr., 1 Sp., 1 uC. Total 11.
- B. Associate Professor C. P. PARKER, Professor E. K. RAND, Drs. WEBB and K. K. SMITH, and Messrs. FORBES and MILLER. — Latin Literature. Livy; Horace; Terence. 2 Ju., 7 So., 83 Fr., 1 Sp. Total 93.
- E ¹/_{hf}. Dr. K. K. SMITH. — Latin Composition (first course). Translation of English Narrative. 1 Ju., 5 So., 1 Fr. Total 7.
1. Professors CLIFFORD H. MOORE and E. K. RAND. — Latin Literature. Tacitus; Catullus; Horace. 1 Se., 2 Ju., 14 So., 2 uC. Total 19.
- 2a ¹/_{hf}. Mr. FORBES. — Latin Literature. General View of Latin Poetry. 1 Se., 1 Ju., 1 So., 1 Fr. Total 4.
- 2b ¹/_{hf}. Dr. WEBB. — Introduction to Latin Prose Literature. Tacitus. 1 Ju., 2 So., 1 Fr., 1 uC. Total 5.
- 3 ¹/_{hf}. Mr. FORBES. — Latin Composition (second course). 1 Gr., 2 Ju., 5 So., 2 uC. Total 10.

For Undergraduates and Graduates:—

GREEK

6. Professor WMIR SMYTH and Dr. POST. — Greek Literature. Demosthenes; Aeschines; Aeschylus; Sophocles; Aristophanes. 1 Gr., 2 Se., 6 Ju., 1 So., 1 And. Total 11.
- 7 ¹/_{hf}. Professor GULICK. — Greek Prose Composition (third course). 4 Gr., 4 Se., 2 Ju. Total 10.
9. Professor ROPES. — Introduction to the Study of the New Testament. Origin and History of the New Testament Writings; The Teachings of Jesus Christ and of the New Testament Authors. 7 Di., 4 And. Total 11.
8. Professor GOODWIN and Associate Professor C. P. PARKER. — Plato; Aristotle. Survey of Greek Philosophy from Thales to Aristotle. 3 Gr., 9 Se., 3 Ju. Total 15.

10. Professor GULICK. — The Life of the Ancient Athenians, described and illustrated by the aid of the Literature and of the Monuments.

1 Gr., 24 Se., 30 Ju., 13 So., 3 Fr., 3 Sp. Total 74.

12. Professor WEIR SMYTH. — History of Classical Greek Literature.

7 Gr., 3 Se., 3 Ju., 2 So., 1 uC. Total 16.

LATIN

6. Professor HOWARD. — Latin Literature. Suetonius; Pliny; Juvenal; Martial.

2 Gr., 3 Se., 4 Ju., 2 So. Total 11.

- 7 *hf.* Associate Professor C. P. PARKER. — Latin Composition (third course).

5 Gr., 6 Se., 3 Ju. Total 14.

8. Professors CLIFFORD H. MOORE and E. K. RAND. — Latin Literature. Cicero; Lucretius; Plautus.

6 Gr., 7 Se., 3 Ju. Total 16.

15. Professor E. K. RAND and Dr. WEBB. — The Works of Virgil, with studies of his Sources and of his Literary Influence.

2 Gr., 2 Se., 1 Ext. Total 5.

Primarily for Graduates:—

CLASSICAL PHILOLOGY

- 25 *hf.* Professor E. K. RAND. — Introduction to the Interpretation and Criticism of Classical Authors. History of Classical Studies.

6 Gr. Total 6.

- 53 *hf.* Professor GULICK. — Introduction to the Critical Study of Homer.

1 Gr., 1 Sp. Total 2.

- 66 *hf.* Dr. POST. — Greek Culture in the Sixth Century B. C.

3 Gr., 1 Ju. Total 4.

- 27 *hf.* Professor GULICK. — Greek Political Theory. Aristotle (Politics).

1 Gr., 1 Ju., 1 uC. Total 3.

- 36 *hf.* Professor E. K. RAND. — Cicero and Humanism.

3 Gr. Total 3.

- 64 *hf.* Associate Professor C. P. PARKER. — The Philosophy of Motion. Heraclitus, Protagoras, Democritus.

2 Gr. Total 2.

- 26 *hf.* Professor WEIR SMYTH. — Theocritus, Bion, and Moschus. Greek Pastoral Poetry.

2 Gr. Total 2.

- 68 *hf.* Asst. Professor C. N. JACKSON. — Lucian and his Times.

4 Gr., 1 uC., 1 Di. Total 6.

- †60. Professor BOPES. — The Gospels of Matthew, Mark, and Luke.

4 Di., 1 And. Total 5.

- 52 *hf.* Professor CLIFFORD H. MOORE. — The Comedies of Plautus.

4 Gr., 1 Se. Total 5.

- 67 *hf.* Mr. FOBES. — Catullus and the Elegiac Poets.

3 Gr., 1 Se., 1 Ju. Total 5.

46. Professor HOWARD. — The Second Punic War. Livy (Books XXI-XXX).

5 Gr. Total 5.

- 21 *hf.* Dr. K. K. SMITH. — Introduction to Greek Epigraphy.

6 Gr. Total 6.

22 ¹/₂f. Professor CLIFFORD H. MOORE. — Latin Grammar (Sounds and Inflections). 8 Gr. Total 8.

32 ¹/₂f. Professor CLIFFORD H. MOORE. — The Religion and Worship of the Romans. 3 Gr. Total 3.

CLASSICAL ARCHAEOLOGY

For Undergraduates and Graduates: —

1a ¹/₂f. Asst. Professor CHASE. — Greek Archaeology. 3 Gr., 9 Se., 2 Ju., 1 So., 1 Fr. Total 16.

1b ¹/₂f. Asst. Professor CHASE. — Etruscan and Roman Archaeology. 2 Gr., 2 Se., 6 Ju., 1 So., 2 Fr., 1 Sp. Total 14.

Primarily for Graduates: —

5 ¹/₂f. Asst. Professor CHASE. — Greek Numismatics. 1 Ju. Total 1.

20. THE SEMINARY OF CLASSICAL PHILOLOGY.

Professors WEIR SMYTH and HOWARD, Directors for 1910–11. — Training in philological criticism and research. Text-criticism and interpretation of Greek and Latin authors: for 1910–11, Aeschylus and Suetonius. 6 Gr. Total 6.

English

ENGLISH COMPOSITION

Primarily for Undergraduates: —

A. Professor BRIGGS and Asst. Professor GREENOUGH, Mr. HERSEY, Drs. BERNBAUM, LONG, CROSS, and LEACH, and Messrs. M. McLEOD, FRENCH, HUNT, SHIPHEED, and C. A. MOORE. — Rhetoric and English Composition. 1 Gr., 1 G.S., 1 Se., 7 Ju., 8 So., 468 Fr., 6 Sp., 10 uC. Total 502.

Of this number, 49 (1 Ju., 48 Fr., 2 Sp., 3 uC.) were relieved of the prescription of English at the end of the first half-year; 22 Fr. took the second half-year's work as an elective half-course.

28a ¹/₂f. Mr. T. HALL, assisted by Mr. COUES. — English Composition. Practice in writing in connection with English 28. 6 Fr., 2 uC. Total 8.

D¹ = ¹/₂f. Dr. WEBSTER, assisted by Dr. CROSS and MESSRS. HUBBARD and HUNT. — English Composition. 1 G.S., 5 Se., 8 Ju., 54 So., 58 Fr., 1 Sp., 8 uC. Total 180.

31. Mr. HAGEDORN. — English Composition. 1 Gr., 1 Se., 1 Ju., 11 So., 7 Fr., 3 Sp., 1 uC. Total 25.

22. Dr. MAYNADIER, assisted by Mr. COUES. — English Composition. 11 Se., 32 Ju., 15 So., 9 Fr., 3 Sp., 6 uC. Total 76.

18. Mr. STONE. — The Forms of Public Address. 12 Se., 28 Ju., 6 So., 1 Fr., 1 Sp., 2 uC. Total 50.

30 ¹/₂f. Mr. STONE. — Debating. 9 Se., 3 Ju., 1 So., 1 Fr., 1 Sp. Total 15.

For Undergraduates and Graduates: —

12. Asst. Professor COPELAND. — English Composition. 1 Gr., 7 Se., 8 Ju., 7 So., 1 Fr. Total 24.

57 *hf.* Professor PERRY. — English Composition.

11 Gr., 1 G.S., 2 Se., 1 Ju., 2 Fr., 2 Sp. Total 19.

Primarily for Graduates: —

5. Professor BRIGGS. — English Composition (advanced course).

12 Gr., 7 Se., 7 Ju., 1 So., 1 Fr., 2 uC., 1 Di. Total 31.

47. Professor BAKER. — English Composition. The Technique of the Drama.

12 Gr., 1 Ju., 1 Sp. Total 14.

ENGLISH LANGUAGE AND LITERATURE

Primarily for Undergraduates: —

28 *hf.* Professors BRIGGS, BLISS PERRY, KITTREDGE, BAKER, and NEILSON, and Mr. T. HALL. — History and Development of English Literature in outline.
1 Gr., 63 Fr., 2 Sp., 2 uC. Total 68.

41. Professor WENDELL, and Mr. W. R. CASTLE, assisted by Messrs. WITHINGTON and HUNT. — History of English Literature from the Elizabethan times to the present.

12 Se., 27 Ju., 44 So., 10 Fr., 1 Sp., 4 uC. Total 98.

37 *hf.* Dr. MAYNADIER. — The Story of King Arthur.

11 Se., 13 Ju., 26 So., 16 Fr., 2 uC. Total 68.

For Undergraduates and Graduates: —

3a *hf.* Dr. WEBSTER. — Anglo-Saxon.

19 Gr., 5 Se., 3 Ju., 1 So., 1 Fr., 1 uC. Total 30.

1. Professors KITTREDGE and F. N. ROBINSON. — Chaucer.

20 Gr., 5 Se., 2 Ju., 1 So. Total 28.

2. Professor KITTREDGE. — Shakspeare.

28 Gr., 19 Se., 28 Ju., 31 So., 2 Fr., 2 Sp., 4 uC. Total 114.

11a *hf.* Professor NEILSON. — Bacon.

9 Gr., 5 Se., 14 Ju., 6 So., 1 Sp. Total 35.

11b *hf.* Professor NEILSON. — Milton.

7 Gr., 7 Se., 15 Ju., 11 So., 5 Fr., 4 uC. Total 49.

61 *hf.* Asst. Professor GREENOUGH. — Eighteenth Century Periodicals, particularly the Tatler, Spectator, Rambler, and Adventurer.

7 Gr., 2 Se., 4 Ju., 7 So., 2 Fr., 1 Sp. Total 23.

58 *hf.* Asst. Professor COPELAND, assisted by Mr. SHEAHAN. — Scott.

2 Gr., 34 Se., 25 Ju., 27 So., 10 Fr., 3 Sp., 1 uC. Total 102.

55 *hf.* Professor BLISS PERRY. — Tennyson.

22 Gr., 41 Se., 66 Ju., 39 So., 3 Sp., 8 uC. Total 179.

48 *hf.* Professor BRIGGS. — Browning.

16 Gr., 4 Se., 6 Ju., 6 So., 1 Fr. Total 33.

Primarily for Graduates: —

19 *hf.* Professor F. N. ROBINSON. — Historical English Grammar.

16 Gr., 1 Sp. Total 17.

- 36 ¹/₂ *hf.* Professor KITTREDGE. — Anglo-Saxon. *Béowulf*.
22 Gr., 1 Se. Total 23.
4. Professors NEILSON and F. N. ROBINSON. — Early English. English Literature from 1200 to 1450. *Mätzner's Altenglische Sprachproben*.
24 Gr. Total 24.
- 40 ³/₄ *hf.* Professor NEILSON. — Scottish Literature from Barbour to Lindesay.
12 Gr. Total 12.
- Comp. Lit. 26 ¹/₂ *hf.* Professor KITTREDGE. — The Early English Metrical Romances. (See Comparative Literature.) 2 Gr. Total 2.
14. Professor BAKER. — The Drama in England from the Miracle Plays to the Closing of the Theatres. 42 Gr., 4 Se., 10 Ju., 2 So., 5 Sp. Total 63.
- 62 ¹/₂ *hf.* Asst. Professor GREENOUGH. — The Character, with some Consideration of Related Forms. 8 Gr., 2 Se. Total 10.
- 49 ¹/₂ *hf.* Professor NEILSON. — Shakspeare. Study of Special Topics.
13 Gr., 1 Ju. Total 14.
- 50 ³/₄ *hf.* Dr. BERNBAUM. — Dryden and the Transition from the Seventeenth to the Eighteenth Century. 18 Gr., 1 Se. Total 19.
- 54 ¹/₂ *hf.* Professor BLISS PERRY. — Carlyle.
15 Gr., 11 Se., 14 Ju., 4 So., 1 uC. Total 45.
- 29 ¹/₂ *hf.* Dr. MAYNADIER. — The English Novel.
6 Gr., 2 Se., 5 Ju., 2 So., 1 Fr., 2 Sp. Total 18.

COURSES OF SPECIAL STUDY

20. The instructors in English held themselves ready to assist and advise competent Graduate Students who might propose plans of special study in the language or literature of the periods or in the topics mentioned below. Such plans, however, must in each case have met the approval of the Department. 2 Gr. Total 2.
- a. Professor F. N. ROBINSON. — Anglo-Saxon. 3 Gr. Total 3.
- c. Professor NEILSON. — Modern English Literature. 6 Gr. Total 6.
- d. Professor BAKER. — The English Drama: its history, and its relation to Continental Drama. 5 Gr. Total 5.

Public Speaking

Primarily for Undergraduates: —

1. Mr. BUNKER. — Voice Training.
2 Gr., 1 G.B., 3 Se., 3 Ju., 8 So., 22 Fr., 1 Sp., 2 uC. Total 42.
- 2 *hf.* Asst. Professor WINTER, and Messrs. WILLARD and BUNKER. — Masterpieces of Public Discourse.
2 Se., 4 Ju., 8 So., 8 Fr., 1 uC. Total 23.
- 3 *hf.* Asst. Professor WINTER, and Messrs. PERRET and R. H. SMITH. — Platform Speaking.
2 Gr., 2 G.B., 22 Se., 32 Ju., 24 So., 7 Fr., 3 Sp. Total 92.

- 4 *hf.* Asst. Professor WINTER and Mr. PERRET. — Dramatic Interpretation.
 8 Se., 1 Ju., 1 So., 2 Sp. Total 7.
5. Asst. Professor WINTER, and Messrs. WILLARD, PERRET, and BUNKER. —
 Advanced Training in Platform Speaking and in Dramatic Interpretation.
 1 Gr., 6 Se., 1 Law. Total 8.

Germanic Languages and Literatures

GERMAN

Primarily for Undergraduates: —

- A. Drs. WEBER, EISENHARDT, and PETTENGILL, and Messrs. IBERSHOFF, HERRICK, A. E. RAND, and SIEVERS. — Elementary Course.
 8 Gr., 4 Se., 11 Ju., 18 So., 161 Fr., 8 Sp., 14 uC., 1 Di. Total 215.
- B. Asst. Professor W. G. HOWARD. — Elementary Course (counting as two courses).
 2 Gr., 4 So., 18 Fr., 1 Sp., 3 uC. Total 28.
- C. Dr. PETTENGILL and Mr. HERRICK. — German Prose and Poetry.
 1 Se., 1 So., 26 Fr., 1 Sp., 1 uC. Total 30.
- 1a. Drs. LIEDER and PETTENGILL. — German Prose and Poetry.
 1 Se., 6 Ju., 27 So., 16 Fr. Total 50.
- 1b. Dr. LIEDER. — German Prose. Subjects in History and Biography.
 1 Se., 4 Ju., 22 So., 11 Fr., 1 Sp. Total 39.
- 1c. Dr. LIEDER. — German Scientific Prose. Subjects in Natural Science.
 2 Gr., 2 Se., 5 Ju., 15 So., 16 Fr., 2 uC. Total 42.
- F*hf.* Mr. HERRICK. — Practice in speaking and writing German (first course).
 2 Se., 1 Ju., 5 So., 5 Fr., 1 uC. Total 14.
- H*hf.* Dr. EISENHARDT. — Practice in speaking and writing German (second course).
 1 Se., 2 Ju., 1 So. Total 4.
- 2a. Professor VON JAGEMANN and Dr. EISENHARDT. — Introduction to German Literature of the Eighteenth and Nineteenth Centuries. Lessing, Goethe, and Schiller. German Ballads and Lyrics.
 5 Se., 7 Ju., 17 So., 17 Fr., 1 uC. Total 47.
- 2b. Professor H. S. WHITE and Dr. LIEDER. — Introduction to German Literature of the Eighteenth and Nineteenth Centuries. Lessing, Goethe, and Schiller. German Ballads and Lyrics.
 1 Se., 8 Ju., 23 So., 44 Fr., 1 uC. Total 77.
- 2c. Dr. WEBER. — German Prose. Subjects in German History. Freytag; Heyck; Kugler; Biedermann; Tombo.
 1 Gr., 1 G.B., 3 Ju., 5 So., 7 Fr., 1 uC. Total 18.
3. Dr. WEBER. — Schiller and his Time. Der Dreissigjährige Krieg; Wallenstein; Maria Stuart; Die Jungfrau von Orleans; Die Braut von Messina; Gedichte.
 8 Se., 5 Ju., 14 So., 2 Fr. Total 24.
4. Professor WALZ. — Goethe and his Time. Works of the Storm and Stress Period; Autobiographical Works; Poems; Egmont; Iphigenie; Tasso; Faust.
 4 Se., 12 Ju., 17 So., 9 Fr., 1 Sp., 1 uC. Total 44.
- 25 *hf.* Professor FRANK, assisted by Mr. T. K. BROWN, Jr. — History of German Literature in outline.
 29 Se., 25 Ju., 15 So., 6 Fr., 2 uC. Total 77.

For Undergraduates and Graduates:—

G hf. Dr. WEBER. — German Grammar and practice in writing German (advanced course). 4 Gr., 1 So. Total 5.

L hf. Mr. GROSSMANN. — German Correspondence. 1 Gr., 1 Se., 2 So., 1 Fr., 1 uC. Total 6.

7 *hf.* Professor FRANCKE, assisted by Mr. GROSSMANN. — History of German Culture from the French Revolution to the end of the Wars of Liberation. 14 Gr., 2 Se., 3 Ju., 1 So. Total 20.

Comp. Lit. 8 *hf.* Professor FRANCKE. — Goethe's Faust; with a study of kindred dramas in European Literature. (See Comparative Literature.) 8 Gr., 1 G.B., 1 Se., 4 Ju., 5 So., 3 Fr., 1 Sp. Total 23.

Comp. Lit. 10 *hf.* Professor WALZ. — The Influence of English Literature upon German Literature in the Eighteenth Century. (See Comparative Literature.) 7 Gr., 1 Se., 7 Ju., 1 So., 2 Fr. Total 18.

26a *hf.* Asst. Professor W. G. HOWARD. — German Literature in the first half of the Nineteenth Century. Kleist; Uhland; Heine. 9 Gr., 2 Se., 7 Ju., 5 So., 1 Sp. Total 24.

26b *hf.* Asst. Professor W. G. HOWARD. — German Literature in the second half of the Nineteenth Century. The Development of the Novel and the Drama. 9 Gr., 1 Se., 4 Ju., 2 So., 1 Sp. Total 17.

32. Professor H. S. WHITE. — Bismarck's Life and Writings. — Selections from Bismarck's speeches, state papers, and private correspondence; with some study of the development of Germany as illustrated in Bismarck's utterances. 2 Se., 6 Ju., 5 So., 2 Fr. Total 15.

8. Professor WALZ. — German Literature in the Twelfth and Thirteenth Centuries. Nibelungenlied; Kudrun; Hartmann; Wolfram; Walther von der Vogelweide. Translation into modern German. 8 Gr., 1 Se., 2 Ju., 1 Sp. Total 12.

Primarily for Graduates:—

‡Comp. Lit. 34 *hf.* Asst. Professor W. G. HOWARD. — The Dramatic Works of Grillparzer considered in their relations to European Literature. 8 Gr. Total 8.

28. Professor H. S. WHITE. — Goethe's Italienische Reise. Readings and translation, with some examination of the original letters and diaries upon which the narrative is based, and with illustrations of the course of Goethe's travels and art studies. 4 Gr., 1 Se., 1 Ju. Total 6.

‡12a *hf.* Professor VON JAGEMANN. — Gothic. Introduction to the Study of Germanic Philology. General Introduction; Phonology. 22 Gr., 1 Se., 1 Sp., 4 R. Total 28.

‡15 *hf.* Professor WALZ. — Old High German. 11 Gr., 1 Sp., 5 R. Total 17.

21. Professor VON JAGEMANN. — History of the German Language. 8 Gr., 1 Se., 1 Ju., 3 R. Total 13.

SEMINARY COURSES

- ‡20a ¹/_{hf}. Professor FRANCKE. — Lessing's Laokoon.
3 Gr., 1 Sp., 4 R. Total 8.
- ‡20b ²/_{hf}. Professor FRANCKE. — Schiller's Philosophical Poems.
2 Gr., 1 R. Total 3.
- 20c ²/_{hf}. Professor VON JAGEMANN. — Hartmann von Aue.
2 Gr., 1 Se., 1 R. Total 4.
- 20d ¹/_{hf}. Professor WALZ. — Bürger and the Poets of the Hainbund.
5 Gr., 1 Instr., 4 R. Total 10.

SCANDINAVIAN

Primarily for Graduates :

2. Dr. LEACH. — Icelandic (Old Norse). The Sagas, the Younger Edda, and the Elder Edda.
2 Gr., 1 Se. Total 3.

Romance Languages and Literatures

FRENCH

Primarily for Undergraduates :—

- A. Dr. WHITTEM, Drs. HAWKINS, MACKENZIE, and WILKINS, and Mr. LINCOLN. — Elementary Course. French prose and composition.
18 Gr., 1 G.S., 1 Se., 6 Ju., 9 So., 64 Fr., 3 Sp., 18 uC., 3 Di. Total 118.
- 1b. Asst. Professor BABBITT, Dr. HAWKINS, MACKENZIE, and WILKINS, and Mr. LINCOLN. — French Prose, historical and general. Translation from French into English.
1 Se., 10 Ju., 21 So., 39 Fr., 2 Sp., 2 uC. Total 75.
- 1a. Associate Professor DE SUMICHRAST and Mr. BRUN. — Reading, translation, grammar, and composition.
5 Ju., 19 So., 14 Fr., 2 Sp., 3 uC. Total 43.
- 2c. Asst. Professor POTTER, Drs. HAWKINS and WHITTEM, and Messrs. LINCOLN and WESTON. — French Prose and Poetry. Corneille; Racine; Molière; Victor Hugo; Alfred de Musset; Balzac; Mérimée; Flaubert; Daudet; Loti; Zola. Composition.
5 Se., 8 Ju., 25 So., 58 Fr., 1 Sp., 3 uC. Total 100.
- 2a. Asst. Professor WRIGHT, Dr. HAWKINS, and Messrs. BRUN, ALLARD, and WESTON. — French Prose and Poetry. Corneille; Racine; Molière; Victor Hugo; George Sand; Alfred de Musset; Rostand. Composition.
1 Se., 5 Ju., 24 So., 105 Fr. Total 135.
3. Mr. ALLARD. — French Composition (elementary course).
7 Se., 3 Ju., 4 So., 10 Fr., 1 uC. Total 25.
- 4 ¹/_{hf}. Mr. BRUN. — French Composition (intermediate course).
1 Gr., 5 Se., 5 Ju., 6 So., 7 Fr., 1 uC. Total 25.
- 5 ²/_{hf}. Mr. BRUN. — French Composition (advanced course).
1 Gr., 1 Se., 5 Ju., 5 So., 6 Fr. Total 18.

For Undergraduates and Graduates:—

- 6c. Professor GRANDGENT. — General View of French Literature.
1 Gr., 2 Se., 2 Ju., 11 So., 2 Fr., 1 Sp. Total 19.
6. Associate Professor DE SUMICHAIST. — General View of French Literature.
1 Gr., 5 Se., 10 Ju., 20 So., 9 Fr., 1 uC. Total 46.
7. Associate Professor DE SUMICHAIST. — French Literature in the Eighteenth Century.
5 Gr., 8 Se., 18 Ju., 1 uC. Total 27.
9. Asst. Professor WRIGHT. — French Literature in the Seventeenth Century.
2 Gr., 3 Ju. Total 5.
10. Asst. Professor WRIGHT. — French Literature in the Sixteenth Century.
3 Gr., 2 Ju. Total 5.
16. Mr. ALLARD. — The French Drama in the Nineteenth Century.
4 Gr., 1 So., 1 Fr., 1 uC. Total 7.
- 18*hf*. Mr. ALLARD. — French Correspondence.
1 Se., 2 Ju., 3 Fr., 1 Law. Total 7.

Primarily for Graduates:—

14. Professors SHELDON and FORD. — French Literature in the Fourteenth and Fifteenth Centuries.
5 Gr., 2 R. Total 7.
- 19*hf*. Professor FORD. — Historical French Syntax.
6 Gr. Total 6.
- 22*hf*. Asst. Professor WRIGHT. — Studies in the French Drama of the Seventeenth Century. Corneille; Racine; Molière.
7 Gr. Total 7.

ITALIAN

Primarily for Undergraduates:—

1. Dr. WILKINS and Mr. WESTON. — Elementary Course.
1 Gr., 1 Se., 10 Ju., 12 So., 10 Fr., 2 Sp., 2 uC. Total 38.

For Undergraduates and Graduates:—

5. Dr. WILKINS. — Modern Italian Literature. Prose and Poetry of the Eighteenth and Nineteenth Centuries. 1 Gr., 3 Se., 2 Ju., 1 So. Total 7.
2. Professor FORD and Mr. WESTON. — Italian Literature of the Fifteenth and Sixteenth Centuries. Torquato Tasso; Ariosto; Machiavelli; Benvenuto Cellini.
5 Gr., 3 Se., 1 So. Total 9.
10. Professor GRANDGENT. — The Works of Dante, particularly the Vita Nuova and the Divine Comedy. 10 Gr., 5 Se., 1 Jr., 2 Fr., 1 uC. Total 19.

SPANISH

Primarily for Undergraduates:—

1. Asst. Professor POTTER, Drs. WHITTEM and MACKENZIE, and Messrs. LINCOLN and RIVERA. — Spanish Grammar, reading, and composition. Modern Spanish Novels and Plays.
2 Gr., 2 Se., 12 Ju., 42 So., 40 Fr., 7 uC. Total 105.
- 17*hf*. Dr. HURTADO. — Spanish Composition.
2 Gr., 5 Se., 7 Ju., 4 So., 1 Sp. Total 19.

For Undergraduates and Graduates:—

18 *hf.* DR. HURTADO. — Spanish Correspondence. 1 Gr., 1 Ju., 1 Sp. Total 3.

4 *hf.* Professor FORD. — A General View of Spanish Literature.

5 Gr., 4 Se., 4 Ju., 2 So., 1 Fr. Total 16.

2. Professor FORD and Dr. WHITTEN. — Spanish Literature of the Sixteenth and Seventeenth Centuries. Cervantes; Lope de Vega; Calderón.

6 Gr., 4 Se., 2 Ju., 4 So., 1 Sp. Total 17.

Primarily for Graduates:—

13. Professor FORD. — Early Spanish. The Poem of the Cid. Spanish Literature to the Fifteenth Century. 12 Gr., 1 Sp., 1 R. Total 14.

ROMANCE PHILOLOGY

Primarily for Graduates:—

3. Professor SHELTON. — Old French. Phonology and inflections. The oldest texts. *La Chanson de Roland*; *Chrétien de Troyes*; *Aucassin et Nicolette*. 17 Gr., 1 Se. Total 18.

4. Professor GRANDJEANT. — Provençal. Language and literature, with selections from the poetry of the troubadours. 6 Gr., 1 R. Total 7.

Celtic

Primarily for Graduates:—

1 ¹/_{hf.} Professor F. N. ROBINSON. — Old Irish. General Introduction to Celtic Philology. 1 Gr. Total 1.

2 ¹/_{hf.} Professor F. N. ROBINSON. — Middle Irish. Windisch's *Irische Texte*. The history of Irish Literature. 2 Gr. Total 2.

THE CELTIC CONFERENCE

Fortnightly conferences were held in Celtic subjects for reading and for the presentation of the results of investigation. In 1910–11 the meetings were chiefly devoted to the study of Ossianic texts in Irish and Scottish Gaelic.

Slavic Languages

For Undergraduates and Graduates:—

1a. Asst. Professor WIENER. — Russian. 2 Ju., 1 So., 2 Instr. Total 5.

4 *hf.* Asst. Professor WIENER. — Introduction to the History of Russian Literature. 1 Gr., 5 Se., 6 Ju., 6 So., 2 Sp. Total 20.

5 ¹/_{hf.} Asst. Professor WIENER. — Tolstoy and his time.

1 Gr., 9 Se., 5 Ju., 1 So., 2 Fr., 2 Sp. Total 20.

Primarily for Graduates:—

3b ¹/_{hf.} Asst. Professor WIENER. — General Survey of Slavic Philology.

1 Gr. Total 1.

Comparative Literature

Primarily for Undergraduates:—

1 ¹/_{hf.} Professor WENDELL, assisted by Dr. LEACH and Mr. HAGEDORN. — European Literature. General Survey.

12 Se., 24 Ju., 41 So., 17 Fr., 1 Sp., 7 uC. Total 102.

For Undergraduates and Graduates:—

7. Asst. Professor POTTER. — Tendencies of European Literature in the Renaissance. 3 Se., 3 Ju., 1 So., 2 Fr. Total 9.
- 10¹/₂hf. Professor WALZ. — The Influence of English Literature upon German Literature in the Eighteenth Century. 7 Gr., 1 Se., 7 Ju., 1 So., 2 Fr. Total 18.
11. Asst. Professor BABBITT. — The Romantic Movement in the Nineteenth Century. 11 Gr., 11 Se., 8 Ju., 8 So., 1 Sp., 1 uC. Total 40.
- 12 ¹/₂hf. Professor BLISS PERRY and Dr. T. P. CROSS. — Types of Fiction in the Eighteenth and Nineteenth Centuries. 22 Gr., 57 Se., 49 Ju., 38 So., 8 Fr., 6 Sp., 7 uC. Total 182.
- 8³/₄hf. Professor FRANCKE. — Goethe's Faust; with a study of kindred dramas in European Literature. 8 Gr., 1 G.B., 1 Se., 4 Ju., 5 So., 3 Fr., 1 Sp. Total 28.

Primarily for Graduates:—

- 16⁵/₈hf. Asst. Professor POTTER. — The History of Pastoral Literature. The Pastoral in modern European Literature. 2 So., 2 Fr., 1 Sp., 1 uC. Total 6.
- 19 ¹/₂hf. Professor BAKER. — The Forms of the Drama. 26 Gr., 3 Se., 1 Ju., 1 So., 4 Sp., 1 uC. Total 36.
22. Asst. Professor BABBITT. — Literary Criticism since the Sixteenth Century. 12 Gr., 1 Se. Total 13.
- 24 ³/₄hf. Professor BLISS PERRY. — Political Satire in Europe since the Renaissance. 12 Gr., 4 Se., 1 Ju., 1 So., 2 Sp., 1 uC. Total 21.
- 26 ¹/₂hf. Professor KITTREDGE. — The Early English Metrical Romances. 2 Gr. Total 2.
- 134 ¹/₂hf. Asst. Professor W. G. HOWARD. — The Dramatic Works of Grillparzer, considered in their Relations to European Literature. 8 Gr. Total 8.
- 35 ¹/₂hf. Dr. WEBSTER. — Life in the Middle Ages, as illustrated by Contemporary Literature. 5 Gr. Total 5.

COURSES OF SPECIAL STUDY

20. Professor KITTREDGE. — Opportunities were afforded to competent students, under the guidance of instructors, for original investigations in special topics, such as were not covered by regular courses in the Department. 1 Gr. Total 1.
- 20c. Professor WEIR SMYTH. — The Relations of Greek Literature to European Literature in other Tongues. 1 Gr. Total 1.
- 20h. Professor FORD. — The Relations of Spanish Literature to European Literature in other Tongues. 3 Gr., 1 Se. Total 4.

Comparative Philology

Primarily for Graduates:—

- 2a hf. Professor GRANDGENT. — General Introduction to Linguistic Science. Phonetics. The Pronunciation of English, French, German, and Latin. 7 Gr., 3 R. Total 10.

History and Government

INTRODUCTORY

Primarily for Undergraduates:—

History 1. Professor HASKINS and Dr. GRAY, assisted by Messrs. VARRELL, HARING, OLSEN, and PACKARD. — Mediaeval History (introductory course). 2 Ju., 82 So., 228 Fr., 2 Sp., 9 uC. Total 273.

History 2. Modern European History.

2a ¹/₂f. Asst. Professor MERRIMAN, assisted by Mr. PERKINS. — History of Western Europe from the close of the Middle Ages to 1715.

7 Se., 25 Ju., 77 So., 13 Fr., 2 Sp. Total 124.

2b ³/₄f. Professor MACVANE, assisted by Mr. PERKINS. — History of Europe from 1715 to the present day.

3 Se., 17 Ju., 61 So., 6 Fr., 2 Sp. Total 89.

Government 1. Asst. Professor MUNRO, assisted by Messrs. DAVIS, GREGG, STEPHENSON, S. C. MCLEOD, and CLEARY. — Constitutional Government.

8 Ju., 91 So., 250 Fr., 6 Sp., 18 uC. Total 368.

I. ANCIENT AND ORIENTAL HISTORY

For Undergraduates and Graduates:—

History 4. Asst. Professor FERGUSON. — History of Greece to the Roman Conquest. 4 Gr., 2 Se., 5 Ju., 3 So., 1 Fr., 1 uC. Total 16.

Primarily for Graduates:—

History 35. Asst. Professor FERGUSON. — Roman Constitutional History.

7 Gr., 1 Sp. Total 8.

Course of Research

History 20¹/₂. Asst. Professor FERGUSON. — Research in Greek and Roman History. 1 Gr. Total 1.

II. MEDIAEVAL HISTORY

For Undergraduates and Graduates:—

History 8 ³/₄f. Dr. GRAY. — History of France to the accession of the Valois kings. 2 Gr., 2 Ju., 2 So., 1 Fr. Total 7.

Primarily for Graduates:—

History 25 ¹/₂f. Professor HASKINS. — Historical Bibliography and Criticism.

7 Gr., 1 Di. Total 8.

†History 21 ¹/₂f. Professor HASKINS. — Introduction to the Sources of Mediaeval History. 2 Gr. Total 2.

History 26¹. Professor EMERTON. — History of Christian Thought, considered in its relation to the prevailing philosophy of each period, from the earliest time to the Eighteenth Century. 3 Di., 1 Ju. Total 4.

History 45 ³/₄f. Professor HASKINS. — Diplomatics.

5 Gr. Total 5.

Courses of Research

History 20a ¹/_{hf}. Professor EMERTON. — Readings from the Literature of the Reformation Period. 1 Gr. Total 1.

History 20c. Professor HASKINS. — Mediaeval Institutions. 2 Gr. Total 2.

III. MODERN EUROPEAN HISTORY

For Undergraduates and Graduates:—

History 7a ¹/_{hf}. Professor EMERTON. — The Era of the Reformation in Europe. First part: from the rise of Italian Humanism to the close of the Council of Basel (1350–1448). 5 Gr., 5 Se., 5 Ju., 2 So., 1 Fr., 1 Di. Total 19.

History 12a ¹/_{hf}. Professor MACVANE. — English History from the Revolution of 1688 to the Reform of Parliament.

5 Gr., 25 Se., 18 Ju., 19 So., 6 Fr., 1 Sp., 1 uC. Total 75.

History 12b ¹/_{hf}. Professor MACVANE. — English History since the Reform of Parliament. 3 Gr., 25 Se., 22 Ju., 20 So., 8 Fr., 2 Sp., 1 uC. Total 81.

History 14. Asst. Professor JOHNSTON. — The French Revolution and Napoleon I. 10 Gr., 22 Se., 19 Ju., 6 So., 3 Fr., 1 uC. Total 61.

History 27 ¹/_{hf}. Asst. Professor JOHNSTON. — The Historical Literature of France and England since the Close of the Eighteenth Century.

1 Gr., 2 Se., 2 Ju. Total 5.

History 16. Asst. Professor MERRIMAN. — History of Spain and the Spanish-American Colonies. 10 Gr., 3 Se., 2 Ju. Total 15.

History 15. Dr. LORD. — History of Russia. 3 Gr., 1 Ju., 1 Fr. Total 5.

History 18 ¹/_{hf}. Professor COOLIDGE. — History of the Far East in the Nineteenth Century. 3 Gr., 7 Se., 8 Ju., 3 So., 2 Fr., 1 Sp. Total 24.

History 30 ¹/_{hf}. Professor COOLIDGE. — The Colonial Expansion of Europe in the Nineteenth Century and the Growth of the British Empire.

2 Gr., 14 Se., 14 Ju., 6 So., 3 Fr., 2 Sp., 1 uC. Total 42.

History 34 ¹/_{hf}. Asst. Professor JOHNSTON. — The Political Geography of Europe. 2 Se., 2 Ju. Total 4.

History 24a ¹/_{hf}. Professor E. C. MOORE. — The History of the Christian Church in Europe within the last three centuries.

14 Se., 27 Ju., 9 So., 3 Fr., 2 Sp., 1 Di., 2 And. Total 58.

History 24b ¹/_{hf}. Professor E. C. MOORE. — The Expansion of Christendom in the Nineteenth Century.

12 Se., 35 Ju., 23 So., 7 Fr., 2 Sp., 3 Di., 1 And. Total 83.

Courses of Research

History 20d. Professor COOLIDGE and Asst. Professor JOHNSTON. — History of Continental Europe and of Asia in the Eighteenth and Nineteenth Centuries. 1 Gr. Total 1.

History 20f ¹/_{hf}. Asst. Professor MERRIMAN. — English Institutions in the Tudor and Stuart Periods. 3 Gr. Total 3.

History 20g. Professor COOLIDGE and Asst. Professor MERRIMAN. — History of Continental Europe in the Sixteenth Century. 2 Gr. Total 2.

‡History 20j. Professor MACVANE. — Recent English History. 1 R. Total 1.

IV. AMERICAN HISTORY

For Undergraduates and Graduates: —

History 10a ¹/_{hf}. Professor CHANNING. — American History to 1760.

10 Gr., 3 Se., 5 Ju., 15 So., 5 Fr., 4 uC. Total 42.

History 10b ¹/_{hf}. Professor CHANNING. — American History (1760–1789).

10 Gr., 3 Se., 6 Ju., 11 So., 4 Fr., 2 uC. Total 35.

History 43a ¹/_{hf}. Professor CHANNING. — Selected Readings in American History. Lecky's "England in the Eighteenth Century."

1 Gr., 4 Se., 3 Ju. Total 8.

History 43b ¹/_{hf}. Professor CHANNING. — Selected Readings in American History. Rhodes's "United States."

1 Gr., 4 Se., 3 Ju. Total 8.

History 17. Professor TURNER. — The History of the West.

16 Gr., 16 Se., 18 Ju., 13 So., 1 Fr., 1 uC. Total 65.

History 13. Professor A. B. HART, assisted by Mr. MORISON. — Constitutional and Political History of the United States (1789–1907).

5 Gr., 27 Se., 45 Ju., 39 So., 9 Fr., 2 Sp., 3 uC. Total 130.

Primarily for Graduates: —

History 23a ¹/_{hf}. Professor CHANNING. — Selected Topics in the Historical Development of American Institutions. The Constitutional History of the Revolutionary Period, 1774–1783.

8 Gr., 1 Se. Total 9.

History 23b ¹/_{hf}. Professor CHANNING. — Selected Topics in the Historical Development of American Institutions. The Economic History of the Critical Period, 1783–1787.

7 Gr., 1 Se. Total 8.

History 44. Professor TURNER. — Selected Topics in Van Buren's Administration.

9 Gr. Total 9.

History 46 ¹/_{hf}. Mr. W. C. FORD. — Manuscript Materials of American History.

4 Gr., 1 R. Total 5.

Courses of Research

History 20e. Professor CHANNING. — American History.

3 Gr., 2 Se., 1 Ju. Total 6.

History 20k. Professor TURNER. — American History.

2 Gr. Total 2.

V. ECONOMIC HISTORY

For Undergraduates and Graduates: —

Economics 6a ¹/_{hf}. Professor GAY, assisted by Mr. KLEIN. — European Industry and Commerce in the Nineteenth Century. (See Economics.)

12 Gr., 1 G.B., 10 Se., 22 Ju., 12 So., 2 Fr., 1 Sp., 1 uC. Total 61.

Economics 6½ hf. Professor GAY, assisted by Mr. KLEIN. — Economic and Financial History of the United States. (See Economics.)

18 Gr., 1 G.S., 1 G.B., 19 Se., 52 Ju., 22 So., 7 Fr., 1 Sp., 3 uC. Total 119.

Economics 11. Professor GAY. — Modern Economic History of Europe. (See Economics.)

6 Gr., 2 Se., 1 Ju. Total 9.

VI. CHURCH HISTORY

History 5, 6, 7a, 24a, 24b, 26, and 20a are courses in Church History. In addition to these, the following courses in Andover Theological Seminary (offered Primarily for Graduates) were open to students in Harvard University: —

History A1. Professor PLATNER. — History of the Church in Outline.

1 Ju., 8 Di., 8 And. Total 13.

History A3. Professor PLATNER. — Christian Institutions, historically and comparatively considered.

2 Gr., 4 Di., 8 And. Total 9.

History A4 ½ hf. Professor PLATNER. — History of the Church in England.

1 Di., 1 And. Total 2.

History A5 ½ hf. Professor PLATNER. — History of the Church in America.

1 uC., 1 Di., 1 And. Total 3.

VII. HISTORY OF RELIGIONS

Primarily for Graduates: —

History of Religions 10 ½ hf. Professor PLATNER. — The Elements of Christianity.

5 Se., 7 Ju., 7 So., 1 Fr., 1 Sp., 1 uC. Total 22.

For Undergraduates and Graduates: —

History of Religions 2. Professor G. F. MOORE. — History of Religions in Outline. — *First half-year:* The Religions of China and Japan, Egypt, Babylonia and Assyria, and the Western Semites (including Judaism and Mohammedanism). *Second half-year:* The Religions of India, Persia, the Greeks, Romans, Germans, and Celts; Christianity.

1 Gr., 4 Se., 8 Ju., 5 So., 2 Sp., 19 Di., 8 And. Total 37.

History of Religions 4 ½ hf. Professor G. F. MOORE. — Judaism, from 198 B.C. to modern times.

1 Ju., 1 So., 1 Sp., 6 Di. Total 9.

History of Religions 5 ½ hf. Professor G. F. MOORE. — Islam. Life of Mohammed; the Koran; the Moslem conquests; Mohammedan law and theology.

1 Gr., 2 Ju., 5 Di., 2 And. Total 10.

VIII. MODERN GOVERNMENT

For Undergraduates and Graduates: —

Government 8. Dr. HOLCOMBE. — The History and Organization of Parties.

2 Gr., 13 Se., 23 Ju., 13 So., 7 Fr., 1 Sp., 1 uC. Total 60.

Government 10. Mr. YEOMANS. — The Government of England.

2 Gr., 4 Se., 8 Ju., 7 So., 2 Fr. Total 18.

Government 17. Asst. Professor MUNRO, assisted by Mr. HULL. — Municipal Government. 1 Gr., 2 Se., 30 Ju., 23 So., 5 Fr., 1 Sp., 3 uC. Total 65.

Government 24 ¹/₂f. Professor HATTON (Western Reserve University).—Municipal Reform in the United States.

6 Gr., 12 Se., 24 Ju., 26 So., 4 Fr., 1 Sp., 3 uC. Total 76.

Government 32 ¹/₂f. (formerly Economics 24 ³/₂f.). Dr. HOLCOMBE.—Municipal Ownership and Control in Europe and Australia.

2 Gr., 3 Se., 6 Ju., 11 So., 1 Fr., 1 Sp., 1 uC. Total 25.

Primarily for Graduates:—

Government 7. Asst. Professor MUNRO and Professor HATTON (Western Reserve University).—Problems of Municipal Administration in Europe and America.

5 Gr., 8 Se. Total 13.

‡Government 12. Professor A. B. HART.—The American Political System, national, state, and municipal.

22 Gr., 7 Se., 4 Ju., 1 uC., 1 Law, 6 R. Total 41.

Courses of Research

Government 20c. Professor A. B. HART.—American Institutions.

3 Gr., 1 Se. Total 4.

IX. LAW AND POLITICAL THEORY

For Undergraduates and Graduates:—

Government 6. Mr. YEOMANS.—History of Political Theories.

9 Gr., 2 Se., 3 Ju., 2 Di. Total 16.

Government 25 ¹/₂f. Mr. JOSEPH WARREN.—Elements of Jurisprudence.

2 Gr., 15 Se., 10 Ju., 3 So., 2 Fr., 1 Sp., 1 uC. Total 34.

Primarily for Graduates:—

Government 19. Professor STIMSON.—American Constitutional Law: A study of constitutional principles and limitations throughout the United States.

7 Gr., 6 Se., 6 Ju., 1 Sp., 1 Di., 2 Law. Total 23.

X. INTERNATIONAL LAW AND DIPLOMACY

For Undergraduates and Graduates:—

Government 4. Professor G. G. WILSON.—Elements of International Law.

8 Gr., 18 Se., 20 Ju., 3 So., 1 Fr., 1 Sp., 2 uC. Total 53.

Primarily for Graduates:—

Government 15. Professor G. G. WILSON.—International Law as administered by the Courts and as observed in International Negotiations.

7 Gr., 3 Se., 1 Ju., 2 Sp. Total 13.

Course of Research

Government 20c. Professor G. G. WILSON.—International Law.

2 Gr., 1 Se. Total 3.

Economics

Primarily for Undergraduates:—

1. Professor TAUSSIG, assisted by Drs. HUSE, E. E. DAY, and FOERSTER, and Mr. BALCOM.—Principles of Economics.

4 Gr., 1 G.S., 14 Se., 96 Ju., 272 So., 99 Fr., 15 Sp., 30 uC. Total 531.

7th *hf.* Dr. HUSE, assisted by Messrs. ELDRED and HESS. — Public Finance considered with special reference to the Theory and Methods of Taxation.

1 G.S., 30 Se., 63 Ju., 69 So., 18 Fr., 2 Sp., 9 uC. Total 192.

I. ECONOMIC THEORY AND METHOD

For Undergraduates and Graduates: —

2. Professor TAUSIG. — Economic Theory.

16 Gr., 1 G.B., 15 Se., 5 Ju., 2 So., 1 Sp., 1 uC., 1 Law. Total 42.

4. Professor YOUNG (Leland Stanford Jr. University). — Statistics. Theory, method, and practice. 5 Gr., 8 Se., 9 Ju., 1 So., 2 Fr., 1 uC. Total 26.

14ath *hf.* Professor CARVER. — The Distribution of Wealth.

5 Gr., 1 G.S., 28 Se., 36 Ju., 9 So., 2 Fr., 3 uC., 2 Di. Total 86.

14bth *hf.* Professor CARVER. — Methods of Social Reform. Socialism, Communism, the Single Tax, etc.

5 Gr., 1 G.B., 20 Se., 32 Ju., 7 So., 1 Fr., 3 uC., 4 Di. Total 78.

Primarily for Graduates: —

†15. Professor BULLOCK. — History and Literature of Economics to the year 1848. 6 Gr. Total 6.

II. ECONOMIC HISTORY

For Undergraduates and Graduates: —

6ath *hf.* Professor GAY, assisted by Mr. KLEIN. — European Industry and Commerce in the Nineteenth Century.

12 Gr., 1 G.B., 10 Se., 22 Ju., 12 So., 2 Fr., 1 Sp., 1 uC. Total 61.

6bth *hf.* Professor GAY, assisted by Mr. KLEIN. — Economic and Financial History of the United States.

13 Gr., 1 G.S., 1 G.B., 19 Se., 52 Ju., 22 So., 7 Fr., 1 Sp., 3 uC. Total 119.

11. Professor GAY. — Modern Economic History of Europe.

6 Gr., 2 Se., 1 Ju. Total 9.

III. APPLIED ECONOMICS

For Undergraduates and Graduates: —

5th *hf.* Professor RIPLEY, assisted by Mr. WHITNACK. — Economics of Transportation. 4 Gr., 48 Se., 65 Ju., 18 So., 5 Fr., 2 uC. Total 142.

8ath *hf.* Dr. HUSE. — Money. A general survey of currency legislation, experience, and theory in recent times.

2 Gr., 30 Se., 50 Ju., 18 So., 2 Fr., 5 Sp., 1 uC. Total 108.

8bth *hf.* Dr. E. E. DAY. — Banking and Foreign Exchange.

1 Gr., 26 Se., 55 Ju., 27 So., 5 Fr., 5 Sp., 4 uC. Total 123.

9ath *hf.* Professor RIPLEY, assisted by Mr. WHITNACK. — Problems of Labor.

6 Gr., 17 Se., 29 Ju., 8 So., 1 Fr., 1 uC., 2 Di. Total 64.

12th *hf.* Dr. E. E. DAY. — Commercial Crises and Cycles of Trade.

1 G.B., 40 Se., 43 Ju., 10 So., 2 Fr., 2 Sp., 1 uC. Total 99.

16. Professor BULLOCK. — Public Finance (advanced course).

5 Gr., 1 Se., 1 Ju. Total 7.

17¹/₂hf. Dr. HUSE. — Municipal Finance.

8 Gr., 11 Se., 5 Ju., 1 So., 1 Sp. Total 21.

23¹/₂hf. Professor CARVER. — Economics of Agriculture, with special reference to American conditions.

5 Gr., 1 G.S., 21 Se., 24 Ju., 10 So., 5 Fr., 1 Sp., 6 uC. Total 73.

28¹/₂hf. Professor YOUNG (Leland Stanford Jr. University). — Insurance and Speculation.

3 Gr., 1 G.B., 27 Se., 35 Ju., 12 So., 1 Fr., 2 Sp., 3 uC. Total 84.

Primarily for Graduates: —

30¹/₂hf. Professor RIPLEY. — Problems in Railroad and Corporation Finance.

2 Gr., 9 Se. Total 11.

IV. COURSES PREPARING FOR A BUSINESS CAREER

For Undergraduates and Graduates: —

18. Asst. Professor COLE, assisted by Messrs. JOHNSON and PLATT. — Principles of Accounting.

3 Gr., 6 G.S., 26 G.B., 118 Se., 59 Ju., 2 So., 5 Fr., 2 Sp., 2 Law.

Total 223.

21¹/₂hf. Professor WYMAN, assisted by Mr. R. M. JOHNSON. — Principles of Law governing Industrial Relations.

4 Gr., 1 G.S., 1 G.B., 103 Se., 47 Ju., 3 So., 3 Fr., 2 Sp. Total 164.

V. SOCIOLOGY

For Undergraduates and Graduates: —

3. Professor CARVER, assisted by Mr. BRISTOL. — Principles of Sociology. Theories of Social Progress.

8 Gr., 9 Se., 27 Ju., 3 So., 2 Fr., 3 Sp., 6 uC., 3 Di. Total 61.

(See Social Ethics)

Social Ethics 1¹/₂hf. Professor PRABODY, Dr. McCONNELL, Dr. FORD, and Dr. FOERSTER. — The Ethics of Modern Industrialism.

2 Gr., 27 Se., 29 Ju., 27 So., 7 Fr., 4 Sp., 3 uC., 4 Di., 1 And. Total 104.

Social Ethics 2¹/₂hf. Dr. BRACKETT. — Practical Problems of Social Service: Public Aid, Charity, and Neighborhood Work.

7 Gr., 3 Se., 3 Ju., 2 Di. Total 15.

Social Ethics 4¹/₂hf. Dr. BRACKETT, Dr. McCONNELL, Dr. FORD, and Dr. FOERSTER. — Selected Topics in Social Ethics.

5 Gr., 3 Se., 2 Ju., 4 So. Total 14.

Social Ethics 5¹/₂hf. Dr. McCONNELL. — The Moral Responsibilities of the Modern State.

2 Gr., 3 Se., 1 Ju., 2 So., 2 Di. Total 10.

Social Ethics 6¹/₂hf. Dr. FOERSTER. — Social Amelioration in Europe.

4 Gr., 4 Se., 6 Ju., 3 So., 2 Sp., 1 Di. Total 20.

Social Ethics 7¹/₂hf. Dr. FORD. — Rural Social Development.

4 Gr., 3 Se., 1 Ju., 2 So., 1 Sp., 2 Di. Total 13.

†Social Ethics 20a¹/₂hf. Professor PRABODY. — Seminary of Social Ethics. Religion and the Social Question.

3 Gr., 1 So. Total 4.

‡Social Ethics 20b¹/₂f. Professor PEABODY. — Special Researches in Social Ethics. 2 Gr., 1 R. Total 3.

Social Ethics 20c. Dr. BRACKETT. — The School for Social Workers. 5 Gr., 1 Ju., 1 Ext. Total 7.

VI. COURSES OF RESEARCH

Primarily for Graduates:—

‡20b. Professor CARVER. — The Laws of Production and Valuation. 1 Gr., 1 R. Total 2.

20d. Professor TAUSSIG. — The Economic History of the United States, with special reference to Tariff Legislation. 1 Gr., 1 Se. Total 2.

20g. Asst. Professor SPRAGUE. — Banking. 2 Gr., 1 Se. Total 3.

THE SEMINARY IN ECONOMICS

Meetings were held by instructors and advanced students for the presentation of the results of investigation.

Business

I. ACCOUNTING

Economics 18. Asst. Professor COLE. — Principles of Accounting. (See Economics.)

3 Gr., 6 G.S., 26 G.B., 118 Se., 59 Ju., 2 So., 5 Fr., 2 Sp., 2 Law. Total 223.

Business 1. Asst. Professor COLE. — Accounting Practice. 15 G.B. Total 15.

Business 2. Asst. Professor COLE. — Accounting Problems. 3 G.B. Total 3.

II. COMMERCIAL LAW

Business 5. Asst. Professor SCHAUB. — Commercial Contracts.

23 G.B. Total 23.

Business 6. Asst. Professor SCHAUB. — Law of Business Associations.

1 Gr., 6 G.B. Total 7.

Business 7¹/₂f. Asst. Professor SCHAUB. — Law of Banking Operations.

2 G.B. Total 2.

III. ECONOMIC RESOURCES

Business 10. Mr. CHERINGTON. — Economic Resources of the United States.

1 Gr., 25 G.B. Total 26.

Business 11. Mr. CHERINGTON. — Commercial Organization and Methods.

19 G.B., 1 uC. Total 20.

Business 14¹/₂f. Mr. DOWNS, Mr. CHERINGTON, and the following lecturers:

Messrs. HERBERT BARBER, JOHN BIRKINBINE, C. L. CHANDLER, T. A. EDDY, W. C. FARABEE, H. N. FISHER, H. G. GRANGER, H. R. A. GRIESER, ALBERT HALE, A. S. HARDY, W. G. REED, Consul-General RICHLING, L. S. ROWE, W. H. SCHOFF, Professor J. RUSSELL SMITH, and W. H. STEVENS. — Economic Resources and Commercial Organization of Central and South America. 2 G.B., 1 uC., 1 Law. Total 4.

Business 16. Mr. CHERINGTON. — Economic Resources of the United States (advanced course). 1 G.B. Total 1.

IV. INDUSTRIAL ORGANIZATION

Business 17 ¹/₄f. Professor GAY and Mr. GUNN, and the following lecturers: Messrs. M. W. ALEXANDER, C. G. L. BARTH, CHARLES DAY, W. B. DICKSON, HARRINGTON EMERSON, J. O. FAGAN, W. C. FISH, H. L. GANTT, C. B. GOING, H. F. J. PORTER, RUSSELL ROBB, W. F. RUSSELL, GERSHOM SMITH, J. E. STERRETT, and F. W. TAYLOR.—Industrial Organization. 1 G.S., 35 G.B., 1 uC. Total 37.

Business 18. Mr. GUNN and the following lecturers: Mr. F. M. FEIKER and Mr. S. E. THOMPSON.—Industrial Organization (advanced course).

8 G.B. Total 8.

Business 20c ³/₄f. Messrs. H. L. BAKER, A. E. BARTER, H. L. BULLEN, J. C. DANA, A. W. ELSON, E. B. HACKETT, W. C. HUEBNER, H. L. JOHNSON, C. C. LANE, A. D. LITTLE, C. E. MASON, J. H. MCFARLAND, A. F. MACKAY, H. M. PLIMPTON, W. S. TIMMIS, J. A. ULLMAN, and D. B. UPDIKE.—An Introduction to the Technique of Printing. 9 G.B. Total 9.

V. BANKING AND FINANCE

Business 21. Asst. Professor SPRAGUE.—Banking. 12 G.B. Total 12.

Business 22. Asst. Professor SPRAGUE.—Banking (advanced course).

2 G.B. Total 2.

Business 24 ³/₄f. Mr. J. F. MOORS.—Investments. 29 G.B. Total 29.

Business 25 ³/₄f. Asst. Professor SPRAGUE and the following lecturers: Messrs. GROSVENOR CALKINS, Hon. W. H. CORBIN, W. J. CURTIS, A. L. DICKINSON, R. F. HERRICK, J. F. HILL, Judge C. M. HOUGH, T. W. LAMONT, G. O. MAY, H. L. STIMSON, and G. W. WICKERSHAM.—Corporation Finance. 1 Gr., 14 G.B. Total 15.

VI. TRANSPORTATION

Business 28. Asst. Professor CUNNINGHAM.—Railroad Operation.

1 G.S., 7 G.B. Total 8.

Business 29. Mr. RICH.—The Railroad and the Shipper: The Theory and Practice of Rate Making, with special reference to the Interstate Commerce Act. 8 G.B., 1 Law. Total 9.

Business 30 ³/₄f. Mr. HOBBS.—Railroad Accounting. 8 G.B. Total 8.

Business 32. Asst. Professor CUNNINGHAM.—Railroad Operation (advanced course). 1 G.B., 1 Law. Total 2.

VII. INSURANCE

Business 35a ¹/₄f. Mr. MEDLICOTT.—Fire Insurance.

1 Gr., 3 G.B., 1 Law. Total 5.

Business 35b ³/₄f. Mr. DOW.—Life Insurance.

5 G.B. Total 5.

Philosophy

Primarily for Undergraduates:—

A-E. INTRODUCTION TO PHILOSOPHY

A ¹/₄f. Professor PALMER.—History of Ancient Philosophy.

1 G.S., 33 Ju., 85 So., 79 Fr., 8 Sp., 12 uC., 1 Di. Total 214.

B³hf. Professor SANTAYANA. — History of Modern Philosophy.
1 G.S., 20 Ju., 54 So., 52 Fr., 1 Sp., 16 uC. Total 144.

C¹hf. Professor ROYCE. — Logic.
1 Se., 10 Ju., 10 So., 20 Fr., 4 Sp., 7 uC. Total 52.

D¹hf. Asst. Professor R. B. PERRY. — General Problems of Philosophy.
1 Gr., 1 G.B., 17 Ju., 16 So., 15 Fr., 2 Sp., 3 uC. Total 55.

E¹hf. Asst. Professor HOLT. — Psychology.
39 Ju., 47 So., 81 Fr., 4 Sp., 8 uC. Total 179.

For Undergraduates and Graduates: —

2³hf. Dr. LANGFELD. — Advanced Psychology.
11 Gr., 5 Se., 7 Ju., 2 So., 1 Sp., 2 uC., 1 And. Total 29.

14¹hf. Asst. Professor HOLT, assisted by Dr. LANGFELD. — Experimental Psychology.
8 Gr., 4 Se., 4 Ju., 2 So., 2 Fr., 1 And. Total 21.

13b¹hf. Asst. Professor YERKES. — Comparative Psychology. Mental Development in the Individual.
10 Gr., 9 Se., 6 Ju., 2 So., 2 uC. Total 29.

6³hf. Asst. Professor YERKES. — Educational Psychology.
12 Gr., 7 Se., 2 Ju., 1 So., 1 Fr., 2 Sp. Total 25.

21a³hf. Asst. Professor YERKES. — Animal Psychology. A study of forms of activity and consciousness in the animal kingdom.
2 Gr., 1 Se., 1 Ju., 1 Fr. Total 5.

3³hf. Asst. Professor R. B. PERRY. — Philosophy of Nature, with especial reference to Man's Place in Nature. Conceptions of nature in the light of moral and religious interests.
2 Gr., 4 Se., 10 Ju., 14 So., 5 Fr., 1 Sp., 2 uC., 1 Di. Total 39.

4. Professor PALMER. — Ethics. The Theory of Morals, considered constructively.
6 Gr., 6 Se., 8 Ju., 5 So., 1 Fr., 2 Sp., 9 Di. Total 37.

9. Professor ROYCE. — Metaphysics. The Fundamental Problems of Theoretical Philosophy. The Concepts of Truth and Reality. Realism, Modern Pragmatism, and Idealism, in their Relations.
18 Gr., 5 Se., 2 Ju., 1 Sp., 10 Di. Total 36.

24¹hf. Asst. Professor R. B. PERRY. — Present Philosophical Tendencies. A brief survey of contemporary Materialism, Idealism, Pragmatism, and Realism.
12 Gr., 13 Se., 2 Ju., 3 So., 1 Fr., 1 uC., 1 Di. Total 33.

16¹hf. Professor FENN. — Theism.
1 Gr., 5 Di., 1 And. Total 7.

19. Professor E. C. MOORE. — Philosophy of Religion.
1 Gr., 1 So., 16 Di. Total 18.

15. Professor ROYCE. — Advanced Logic. Modern doctrines regarding the thinking process and regarding the principles of the Exact Sciences. Outlines of a Theory of Knowledge. The Relations of Deduction and Induction.
5 Gr., 3 Se., 1 Ju., 2 So., 1 uC. Total 12.

18. Asst. Professor WOODS. — Philosophical Systems of India, with special reference to Vedanta, Sankhya, and Yoga.
3 Gr., 1 Se., 2 So. Total 6.

12. Professor SANTAYANA. — Greek Philosophy, with special reference to Plato.
7 Gr., 6 Se., 8 Ju., 4 So., 1 Sp., 5 Di. Total 31.

7¹/₂ *hf.* Asst. Professor R. B. PERRY. — History of Ethics. Utilitarianism. Bentham, Mill, Spencer, Sidgwick.

3 Gr., 4 Se., 6 Ju., 3 So., 3 Fr., 2 uC., 2 Di. Total 23.

11¹/₂ *hf.* Asst. Professor Woods. — Descartes, Spinoza, and Leibnitz.

3 Gr., 1 Se., 2 Ju., 1 Di. Total 7.

11¹/₂ *hf.* Asst. Professor Woods. — English Philosophy from Locke to Hume.

3 Gr., 1 Se., 2 Ju., 3 So., 1 Fr., 1 Di. Total 11.

8 *hf.* Professor ROYCE. — The Kantian Philosophy. 8 Gr., 2 Di. Total 10.

10 *hf.* Professor SANTAYANA. — Philosophy of Art.

9 Gr., 10 Se., 15 Ju., 7 So., 1 Fr., 3 Sp., 3 uC. Total 48.

Primarily for Graduates: —

COURSES OF SPECIAL STUDY

20a. Asst. Professor HOLY and Asst. Professor YERRES. — Psychological Laboratory. Experimental investigations in Human and Animal Psychology by advanced students. 6 Gr., 1 Se. Total 7.

20b. Asst. Professor HOLY. — Seminary in Psychology. Recent Developments in Experimental Psychology. 8 Gr. Total 8.

20c. Professor ROYCE. — Seminary in Logic. A Comparative Study of those Concepts of Human Thought which have to do with the Relations of Cause and Effect. 7 Gr., 1 Ju. Total 8.

20d. Professor PALMER. — Seminary in Ethics. The Systematization of Ethics. 7 Gr., 2 Di., 1 R. Total 10.

20e *hf.* Asst. Professor R. B. PERRY. — Seminary in the Theory of Knowledge. Consciousness. 15 Gr., 1 Se., 1 Di. Total 17.

20f *hf.* Professor ROYCE. — Seminary in the History of Philosophy. Hegel's Dialectical Method. 4 Gr., 1 Di., 1 R. Total 6.

20i *hf.* Professor E. C. MOORE. — Seminary in Theology. Modern Theology, especially as influenced by Ritschl: a survey of constructive work in Theology during the last twenty years in Germany, England, and America. 1 Sp., 2 Di., 1 R. Total 4.

Social Ethics

For Undergraduates and Graduates: —

1 *hf.* Professor PRABODY, Dr. McCONNELL, Dr. FORD, and Dr. FOERSTER. — The Ethics of Modern Industrialism.

2 Gr., 27 Se., 29 Ju., 27 So., 7 Fr., 4 Sp., 3 uC., 4 Di., 1 And. Total 104.

2 *hf.* Dr. BRACKETT. — Practical Problems of Social Service: Public Aid, Charity, and Neighborhood Work. 7 Gr., 3 Se., 3 Ju., 2 Di. Total 15.

4 *hf.* Selected Topics in Social Ethics.

Dr. BRACKETT. — The State and Charity.

Dr. McCONNELL. — The Ethical Relations of the State to Industrial Affairs.

Dr. FORD. — The Ethical Aspects of Industrial Coöperation.

Dr. FOERSTER. — The Ethics of Immigration.

5 Gr., 3 Se., 2 Ju., 4 So. Total 14.

- 5 ¹hf. Dr. McCONNELL. — The Moral Responsibilities of the Modern State.
2 Gr., 3 Se., 1 Ju., 2 So., 2 Di. Total 10.
- 6 ²hf. Dr. FORRESTER. — Social Amelioration in Europe.
4 Gr., 4 Se., 6 Ju., 3 So., 2 Sp., 1 Di. Total 20.
- 7 ¹hf. Dr. FORD. — Rural Social Development.
4 Gr., 3 Se., 1 Ju., 2 So., 1 Sp., 2 Di. Total 13.

Primarily for Graduates: —

COURSES OF RESEARCH

- ‡20a ²hf. Professor PRABODY. — Seminary of Social Ethics. Religion and the Social Question.
3 Gr., 1 So. Total 4.
- ‡20b ²hf. Professor PRABODY. — Special Researches in Social Ethics.
2 Gr., 1 R. Total 3.
- 20c. Dr. BRACKETT. — The School for Social Workers.
5 Gr., 1 Ju., 1 Ext. Total 7.

Education

For Undergraduates and Graduates: —

- 1a ²hf. Professor CUBBERLEY (Leland Stanford Jr. University). — The History of Education in Europe since the Reformation.
7 Gr., 6 Se., 6 Ju., 7 So., 4 Fr., 3 Sp., 3 uC. Total 36.
- 2a ¹hf. Professor HANUS. — Introduction to the Study of Education. Discussion of Educational Principles.
8 Gr., 39 Se., 31 Ju., 29 So., 12 Fr., 6 Sp., 3 uC. Total 128.
- 2b ²hf. Professor HANUS. — School Administration as a Branch of Municipal Affairs. Contemporary Tendencies and Problems.
4 Gr., 10 Se., 9 Ju., 2 So., 4 Fr., 2 Sp., 2 uC. Total 33.
- 6a ¹hf. Asst. Professor HOLMES. — Educational Theory in the Early Nineteenth Century. Froebel.
3 Gr., 3 Se., 1 Ju., 1 So., 2 Sp. Total 10.
- 6b ²hf. Asst. Professor HOLMES. — Educational Theory in the Early Nineteenth Century. Pestalozzi, Herbart, and their Followers. The Influence of Pestalozzi, Froebel, and Herbart on the Development of Modern Schools.
7 Gr., 4 Se., 4 Ju., 3 So., 2 Sp. Total 20.

Primarily for Graduates: —

- ‡3a. Professor HANUS. — Organization and Management of State and City Schools and School Systems. Rural School Systems. Duties and Opportunities of Superintendents and Principals.
8 Gr., 3 Se., 1 uC., 1 R. Total 13.
- ‡3b. Professor HANUS and Asst. Professor HOLMES. — Secondary Education: Public High Schools, Endowed and Private Schools.
10 Gr., 7 Se., 1 Ju., 6 R. Total 24.
- 3c. Asst. Professor HOLMES. — Elementary Education. Programmes of study, equipment, methods.
5 Gr., 7 Se., 1 Sp., 1 uC. Total 14.

SEMINARY COURSES

- ‡20a. Professor HANUS. — Seminary. Contemporary Problems in Education.
12 Gr., 1 Se., 3 R. Total 16.

- 20c ¹/₂f. Professor CUBBERLEY (Leland Stanford Jr. University).—Seminary.
The Evolution and Present Status of Education in Certain Selected States.
3 Gr., 2 Se. Total 5.

The Fine Arts

Primarily for Undergraduates:—

1. Asst. Professor POPE and Mr. MOWER, assisted by Mr. R. E. JONES.—
Principles of Drawing and Painting, with elementary practice.
2 G.S., 1 Se., 6 Ju., 11 So., 37 Fr., 1 Sp., 3 uC. Total 61.

For Undergraduates and Graduates:—

- 2a. Asst. Professor POPE and Mr. MOWER.—Freehand Drawing (formerly
Architecture 3a).
6 G.S., 2 Se., 8 Ju., 8 So., 1 Fr., 2 Sp., 1 uC. Total 28.
- 2b. Mr. MOWER.—Freehand Drawing (advanced course).
4 G.S., 8 Se., 4 Ju., 2 Sp. Total 18.
3. Asst. Professor CHASE, assisted by Mr. FROST.—History of Ancient Art.
Architecture, Sculpture, and Painting in Egypt, Assyria, and Greece, with
some account of the lesser arts.
13 Se., 27 Ju., 12 So., 6 Fr., 1 Sp., 1 uC. Total 60.
- 4a. Mr. FITZPATRICK, assisted by Mr. BORDEN.—The Fine Arts of the Middle
Ages and the Renaissance. 1 Gr., 4 Se., 18 Ju., 3 So. Total 26.
- 4c ¹/₂f. Mr. FITZPATRICK.—History of Renaissance Sculpture.
1 Se., 2 Ju. Total 3.
- 5 ¹/₂f. Mr. W. C. LANE.—The History of the Printed Book.
1 G.B., 2 Se., 1 Sp. Total 4.
- 8a ¹/₂f. (formerly Architecture 7a). Asst. Professor POPE and Mr. E. O.
PARKER.—The Theory of Pure Design.
1 Se., 5 Ju., 3 So., 1 Fr., 1 uC. Total 11.
- 8b ¹/₂f. (formerly Architecture 7b). Dr. ROSS and Mr. E. O. PARKER.—On
Drawing and Painting: Theory and Practice.
4 Ju., 3 So., 3 Fr., 2 uC. Total 12.
9. Dr. POST.—The Art and Culture of Italy in the Middle Ages and the
Renaissance. 1 Gr., 5 Se., 6 Ju., 4 So., 1 Fr., 3 Sp., 4 uC. Total 24.

Primarily for Graduates:—

COURSE OF SPECIAL STUDY

- 120a. Mr. FITZPATRICK.—History and Principles of Engraving. Investiga-
tion of technical processes. Consultation of authorities; examination
of prints. 1 Se., 2 R. Total 3.
- 20b ¹/₂f. Mr. E. W. FORBES.—Florentine Painting. 1 Gr., 1 Se. Total 2.
- 20c ¹/₂f. (formerly Architecture 20b). Dr. ROSS.—Advanced Practice in Draw-
ing and Painting. 1 Gr., 2 Se., 1 Ju. Total 4.

Architecture

For Undergraduates and Graduates:—

- 1a. Professor H. L. WARREN and Mr. FROST. — Technical and Historical Development of the Ancient Styles, with especial reference to Classic Architecture. 7 G.S., 5 Ju., 10 So., 2 Sp., 1 uC. Total 25.
- 1b. Professor H. L. WARREN and Mr. FROST. — Technical and Historical Development of the Mediaeval Styles of Architecture. 9 G.S., 7 Se., 7 Ju., 3 So., 1 Fr., 3 Sp. Total 30.
- 2a. Mr. FROST and occasional criticism by Mr. E. T. PUTNAM. — Elementary Architectural Drawing. Elements of Architectural Form. The Orders. 3 Ju., 2 So., 1 uC. Total 6.
- 2b. Mr. E. T. PUTNAM, assisted by Mr. FROST. — Descriptive Geometry, Shades and Shadows, and Perspective. 1 G.S., 2 Se., 2 Ju., 5 So., 1 Fr., 1 uC. Total 12.
- 3b. Mr. H. B. WARREN and Mr. MURPHY. — Freehand Drawing (second course). Drawing from the Life. 10 G.S., 1 Se., 2 Ju., 1 Sp. Total 14.

Primarily for Graduates:—

- 3c. Mr. H. B. WARREN and Mr. MURPHY. — Freehand Drawing (third course). Architectural Subjects and from the Life. 1 Se., 1 Fr., 1 Sp. Total 3.
- 3d. Mr. H. B. WARREN and Mr. MURPHY. — Freehand Drawing (fourth course). Architectural Subjects and from the Life. 1 Gr., 3 G.S. Total 4.
- 4a. Mr. E. T. PUTNAM, with lectures by Professor H. L. WARREN. — Elementary Architectural Design. 3 G.S., 3 Se., 1 Ju. Total 7.
- 4b. Professor H. L. WARREN. — Architectural Design (second course). 10 G.S., 2 Se., 1 Fr., 3 Sp. Total 16.
- 4c. Professor DESPRADILLE (Mass. Institute of Technology), assisted by Mr. FROST. One Problem under the direction of Mr. R. A. CHAM. — Architectural Design (advanced course). 3 G.S. Total 3.
- 5a. Asst. Professor KILLAM. — Construction of Buildings: Materials and Methods. 4 G.S., 2 Ju., 1 So. Total 7.
- 5d¹5f. Asst. Professor KILLAM. — Resistance of Materials. Elementary Structural Design. 1 G.S., 2 Ju., 1 Sp., 1 uC. Total 5.

COURSES OF SPECIAL STUDY

- 20a. Professor H. L. WARREN. — History of Architecture. 1 Gr., 2 G.S. Total 3.
- 20c. Asst. Professor KILLAM. — Advanced Practice in Construction of Buildings. 1 G.S. Total 1.

Landscape Architecture

For Undergraduates and Graduates:—

1. Asst. Professor PRAY. — Principles of Landscape Architecture. 2 G.S., 15 Se., 25 Ju., 15 So., 10 Fr., 4 Sp., 2 uC. Total 73.

Primarily for Graduates:—

2. Mr. H. V. HUBBARD, with occasional instruction by Asst. Professor PRAY. — Practice in Design (first course). 5 G.S., 1 Sp. Total 6.
3. Asst. Professor PRAY and Mr. H. V. HUBBARD, with occasional instruction by Professor OLMSTED. — Practice in Design (second course). Park and city planning. 6 G.S. Total 6.
4. Mr. H. V. HUBBARD. — Principles of Construction (first course). 6 G.S. Total 6.
5. Mr. H. V. HUBBARD, with occasional instruction by Asst. Professor PRAY. — Principles of Construction (second course). 6 G.S., 1 Sp. Total 7.
6. Mr. WATSON. — Elements of Horticulture. 4 G.S., 1 Ju. Total 5.
7. Mr. WATSON. — Plants in Relation to Planting Design. 3 G.S., 1 Ju., 1 Sp. Total 5.
8. Mr. WATSON. — Planting Design (first course). 4 G.S., 1 Sp. Total 5.
9. Mr. WATSON. — Planting Design (second course). Advanced work following the methods of Course 8. 6 G.S. Total 6.
10. Asst. Professor PRAY, with occasional conferences with Professor OLMSTED. — Principles of City Planning, illustrated by a critical study of examples. 11 G.S., 1 Sp. Total 12.
11. Mr. H. V. HUBBARD, with occasional instruction by Asst. Professor PRAY. — Elementary Drafting, with special reference to forms used in Landscape Design. 4 G.S., 1 Ju. Total 5.
20. Asst. Professor PRAY. — Competent students were directed in special work in design following Landscape Architecture 3, or in research on some special topic. 1 Gr., 1 Se. Total 2.

Music*For Undergraduates and Graduates:—*

1. Asst. Professor HEILMAN, assisted by Dr. DAVISON. — Harmony, the Grammar of Music. 2 Gr., 4 Se., 3 Ju., 9 So., 30 Fr., 1 uC. Total 49.
2. Asst. Professor HEILMAN. — Counterpoint. 2 Se., 2 Ju., 1 So., 3 Fr. Total 8.
- 2a ¹/₂ Asst. Professor SPALDING. — Vocal Composition; part-writing, strict and free, together with analysis of choral works of the great composers. 1 Gr., 1 So., 1 Fr. Total 3.
3. Asst. Professor SPALDING. — History of Music from the time of Palestrina to the present day. 1 Gr., 8 Se., 13 Ju., 21 So., 10 Fr., 1 Sp., 2 uC. Total 56.
- 9 ¹/₂ Professor MAX FRIEDLÄNDER. — The Life and Works of Beethoven, with musical illustrations. 2 Gr., 1 G.B., 1 So. Total 4.
- 10 ¹/₂ Professor MAX FRIEDLÄNDER. — Romanticism in Music, from von Weber and Chopin to Berlioz and Schumann, with musical illustrations. 2 Gr., 1 G.B., 1 So. Total 4.
4. Asst. Professors SPALDING and HEILMAN. — The Appreciation of Music; analytical study of masterpieces from the point of view of the listener. 2 Gr., 6 Se., 14 Ju., 12 So., 5 Fr., 1 Sp., 2 uC. Total 42.

8 ¹/_{hf}. Professor MAX FRIEDLÄNDER. — General History of Music of the Eighteenth Century, from Scarlatti to Haydn and Mozart.

1 Se., 6 Ju., 2 So., 1 Sp. Total 10.

4a ¹/_{hf}. Asst. Professor HEILMAN. — Brahms, Tchaikovsky, and Franck: an analytical and appreciative study of their works, with reference to style, structure, and content.

1 Gr., 1 Se., 3 Ju., 3 So. Total 8.

4b ¹/_{hf}. Mr. HILL. — D'Indy, Fauré, Debussy: a critical study of their respective contributions to modern music. 2 Se., 2 Ju., 3 So., 1 Sp. Total 8.

Primarily for Graduates: —

16. Mr. HILL. — Instrumentation. 1 Gr., 4 Ju., 1 So., 1 Sp. Total 7.

20 ¹/_{hf}. Professor MAX FRIEDLÄNDER. — Studies in General Musical Knowledge, for advanced students. Interpretation of selected standard works of musical literature.

1 Ju., 1 Sp., 1 uC., 1 R. Total 4.

Mathematics

Primarily for Undergraduates: —

F. Asst. Professors WHITTEMORE and COOLIDGE. — Trigonometry and Plane Analytic Geometry. 5 Ju., 13 So., 78 Fr., 1 Sp., 3 uC. Total 95.

A ¹/_{hf}. Mr. FULLERTON. — Logarithms; Plane and Spherical Trigonometry.

2 Se., 5 Ju., 5 So., 30 Fr. Total 42.

C. Professor BYERLY. — Plane and Solid Analytic Geometry (extended course).

1 Gr., 1 G.S., 4 Ju., 7 So., 38 Fr., 1 Sp., 4 uC. Total 56.

D ¹/_{hf}. Mr. FULLERTON. — Algebra. 2 Se., 2 Ju., 8 So., 25 Fr., 1 Sp. Total 38.

E ¹/_{hf}. Mr. FULLERTON. — Solid Geometry.

4 Se., 3 Ju., 3 So., 17 Fr., 1 Sp. Total 28.

H ¹/_{hf}. Asst. Professors HUNTINGTON, COOLIDGE, and H. N. DAVIS. — A Brief Survey of Mathematics for the General Student.

3 Ju., 11 So., 16 Fr., 1 uC. Total 31.

3. Professor BÔCHER. — Differential and Integral Calculus (first course).

1 Gr., 1 G.S., 3 Se., 18 Ju., 42 So., 6 Fr., 1 Sp., 6 uC. Total 78.

4. Asst. Professor H. N. DAVIS. — The Elements of Mechanics.

6 Gr., 1 G.S., 1 Se., 8 Ju., 4 So., 2 uC. Total 22.

For Undergraduates and Graduates: —

3. Asst. Professor COOLIDGE. — Introduction to Modern Geometry and Modern Algebra. 6 Gr., 2 Se., 4 Ju., 4 So., 1 uC. Total 17.

1 ¹/_{hf}. Dr. DOHMEN. — The History of Mathematics.

1 Gr., 4 Se., 2 Ju., 1 So. Total 8.

5. Professor OSGOOD. — Differential and Integral Calculus (second course).

7 Gr., 11 Ju., 1 So., 1 Fr., 2 Sp., 2 uC. Total 24.

12 ¹/_{hf}. Professor OSGOOD. — Infinite Series and Products.

13 Gr., 2 Se. Total 15.

14b ¹/_{hf}. Professor OSGOOD. — Algebra. Galois's Theory of Equations.

8 Gr., 2 Se., 1 R. Total 11.

9. Professor BYERLY. — Dynamics of a Rigid Body.

5 Gr., 4 Se., 1 Sp. Total 10.

Primarily for Graduates:—

- ‡18. Asst. Professor WHITTEMORE.—The Theory of Functions (introductory course). 7 Gr., 2 Se. Total 9.
- ‡16a ¹/_{hf}. Asst. Professor WHITTEMORE.—The Calculus of Variations. 4 Gr. Total 4.
- ‡16b ³/_{hf}. Asst. Professor WHITTEMORE.—The Equations of Mechanics. 1 Gr., 1 Se., 1 R. Total 3.
- ‡28 ¹/_{hf}. Asst. Professor COOLIDGE.—Projective Geometry. 2 Gr., 2 Se., 1 Sp., 1 R. Total 6.
- ‡29 ³/_{hf}. Asst. Professor COOLIDGE.—Non-Euclidean Geometry. 2 Gr., 2 Se., 1 Sp. Total 5.
- ‡10. Professors BYERLY and B. O. PIERCE.—Trigonometric Series. Introduction to Spherical Harmonics. The Potential Function. 3 Gr. Total 3.
- ‡17. Professor OSGOOD.—The Theory of Functions (advanced course). The Algebraic Functions and their Integrals. The Logarithmic Potential. 4 Gr. Total 4.
- ‡19. Professor BÔCHER.—Ordinary Linear Differential Equations. 5 Gr. Total 5.
- 33 ³/_{hf}. Associate Professor E. B. WILSON (Mass. Institute of Technology).—Statistical Methods in Theoretical Physics. 3 Gr. Total 3.

‡SEMINARY IN THE THEORY OF FUNCTIONS

- Professor OSGOOD and Asst. Professor WHITTEMORE. 5 Gr., 2 Se. Total 7.

COURSES OF RESEARCH

- ‡20c. Professor BÔCHER.—Fourier's Series and Analogous Developments. 2 Gr. Total 2.
- ‡20f. Asst. Professor COOLIDGE.—Topics in Higher Geometry. 1 Gr. Total 1.

Astronomy

Primarily for Undergraduates:—

- Professor WILLSON and Dr. DUNCAN.—Descriptive Astronomy. 1 G.S., 10 Se., 11 Ju., 22 So., 3 Fr., 3 Sp., 4 uC. Total 54.
 - ¹/_{hf}. Professor WILLSON.—Practical Astronomy. Application of Astronomy to Navigation and Exploration. 1 Gr., 2 G.S., 5 Se., 5 Ju., 1 So., 2 Sp. Total 16.
- E ¹/_{hf}. Dr. DUNCAN.—Astronomy for Engineers. A modification of the first half-year of Astronomy 1, in which special attention was given to the methods of determining the meridian, finding the variation of the compass, time and latitude by theodolite, etc. 5 Se., 9 Ju., 4 So., 2 Fr. Total 20.

For Undergraduates and Graduates:—

- Professor WILLSON.—Practical Astronomy. Portable and fixed instruments. Time and longitude by transit; latitude by zenith telescope; meridian circle. 2 Gr., 2 Se., 2 Ju., 1 Sp. Total 7.

4a ¹/₄f. DR. DUNCAN. — The Determination of Orbits. Olbers' method for the parabolic orbits; Gauss' method for elliptic orbits. 1 Se. Total 1.

4b ¹/₄f. DR. DUNCAN. — The Determination of Orbits. Leuschner's method for orbits of any eccentricity; orbits of visual and spectroscopic binary stars. 2 Se. Total 2.

Primarily for Graduates: —

5. Professor WILLSON. — Practical Astronomy. Instruments of the fixed observatory. Meridian circle; almucantar; equatorial instrument; absolute determinations. 1 Se. Total 1.

Physics

Primarily for Undergraduates: —

B. Professor HALL, Asst. Professor G. W. PIERCE, and Mr. CHAFFEE. — Elementary Physics. 5 Ju., 11 So., 28 Fr., 8 Sp., 1 uC. Total 48.

C. Professor SABINE, Asst. Professors G. W. PIERCE, LYMAN, H. W. MORSE, and H. N. DAVIS, Dr. BRIDGMAN, and Mr. HAYES. — Experimental Physics. Mechanics, Sound, Light, Magnetism, and Electricity. 4 Gr., 8 Se., 15 Ju., 37 So., 60 Fr., 6 Sp., 8 uC. Total 133.

1. Professor HALL and Mr. R. D. DAVIS. — General Descriptive Physics. 4 Se., 3 Ju., 7 So., 10 Fr., 2 uC. Total 26.

11 ¹/₄f. Asst. Professor H. W. MORSE. — The Theory of Primary and Secondary Batteries. 4 Se., 2 Ju., 1 So. Total 7.

For Undergraduates and Graduates: —

2 ¹/₄f. Professor SABINE and Asst. Professor LYMAN. — Light. 3 Gr., 2 Se. Total 5.

3. Professor B. O. PIERCE, assisted by Mr. R. H. KENT. — Electrostatics, Electrokinematics, and parts of Electromagnetism. 1 G.S., 3 Se., 12 Ju., 4 So., 1 Sp. Total 21.

12 ¹/₄f. Asst. Professor LYMAN. — Electric Conduction in Gases and Radioactivity, with special reference to Modern Theories of the Constitution of Matter. 1 Gr., 2 G.S., 2 Se., 7 Ju., 1 So., 1 Sc. Total 14.

17 ¹/₄f. Asst. Professor G. W. PIERCE. — Electric Waves and their Application to Wireless Telegraphy. 3 G.S., 1 Se., 6 Ju., 3 So., 1 Sp., 1 uC. Total 15.

4. Asst. Professors G. W. PIERCE and LYMAN. — Magnetism, Electromagnetism, and Electrodynamics. 3 Gr., 5 G.S., 2 Se., 2 Ju., 1 Sc. Total 18.

5. Professor SABINE. — Light. 4 Gr., 2 Se. Total 6.

6a ¹/₄f. Professor HALL. — Elements of Thermodynamics. 1 Gr., 1 Se., 2 Ju., 1 Fr. Total 5.

6b ¹/₄f. Professor HALL. — Modern Developments and Applications of Thermodynamics. 1 Gr., 1 Se., 2 Ju. Total 4.

14 ¹/₄f. Asst. Professor H. W. MORSE. — The Theory of Photography. 1 Se., 3 Ju., 2 So. Total 6.

15 ¹/₄f. Asst. Professor G. W. PIERCE. — Radiation. 3 Gr., 1 Se. Total 4.

Primarily for Graduates:—

- ‡7 ¹/₂f. Professor HALL. The Kinetic Theory of Gases. 4 Gr. Total 4.
 ‡9. Professor B. O. PIERCE.—The Mathematical Theory of Electricity and Magnetism. 9 Gr., 1 Sp. Total 10.

COURSES OF RESEARCH

- 20d. Professor SABINE.—Light and Heat. 3 Gr. Total 3.
 20e. Asst. Professor G. W. PIERCE.—Radiation and Electromagnetic Waves. 1 Gr., 1 G.S. Total 2.
 20f. Asst. Professor H. W. MORSE.—Molecular Physics. 1 Gr. Total 1.
 20g. Asst. Professor LYMAN.—Light of Short Wave-Lengths. 1 Gr. Total 1.
 20h. Asst. Professor H. N. DAVIS.—Heat. 2 Gr. Total 2.

Chemistry

Primarily for Undergraduates:—

1. DR. LATHAM CLARKE, Messrs. KELLEY and FISKE, assisted by Messrs. HOOVER, BOLTON, W. N. JONES, and PATCH.—Descriptive Inorganic Chemistry. 1 Gr., 6 Se., 19 Ju., 50 So., 172 Fr., 5 Sp., 9 uC. Total 262.
 2 ¹/₂f. Mr. KELLEY, assisted by Mr. M. W. COX.—Organic Chemistry (elementary course). 2 G.S., 8 Se., 25 Ju., 49 So., 12 Fr., 2 Sp., 8 uC. Total 106.
 3. DR. G. S. FORBES, assisted by Mr. COOMBS and Messrs. WOODWARD, CONROY, and BREHAUT.—Qualitative Analysis. 3 G.S., 4 Se., 21 Ju., 34 So., 3 Fr., 1 Sp., 3 uC. Total 69.

For Undergraduates and Graduates:—

4. Asst. Professor BAXTER, assisted by Mr. VOTER.—Quantitative Analysis, gravimetric and volumetric. 4 Gr., 2 Se., 14 Ju., 14 So., 2 Fr., 3 uC. Total 39.
 8 ¹/₂f. Professor RICHARDS and Dr. G. S. FORBES, assisted by Mr. BARRY.—Elementary Theoretical and Physical Chemistry, including the Historical Development of Chemical Theory. 2 Gr., 1 G.S., 3 Se., 17 Ju., 28 So., 3 Fr., 8 uC. Total 62.
 11. DR. LATHAM CLARKE.—Industrial Chemistry. 10 Gr., 6 Se., 12 Ju., 3 So., 1 uC. Total 32.
 9 ¹/₂f. Asst. Professor BAXTER, assisted by Dr. C. J. MOORE.—Advanced Quantitative Analysis. 6 Gr., 4 Se., 2 Ju., 1 So., 1 uC. Total 14.
 10 ¹/₂f. Asst. Professor BAXTER, assisted by Dr. C. J. MOORE.—Gas Analysis. 6 Gr., 4 Se., 3 Ju., 1 uC. Total 14.
 5. Associate Professor F. J. MOORE (Mass. Institute of Technology), assisted by Mr. ESSELEN.—The Carbon Compounds. 6 Gr., 5 Se., 14 Ju., 5 So., 1 Sp., 3 uC. Total 34.
 15 ¹/₂f. Asst. Professor HENDERSON.—General Biological Chemistry. 5 Gr., 8 Se., 10 Ju., 9 So., 3 uC. Total 35.

Primarily for Graduates:—

6. Professor RICHARDS and Dr. G. S. FORBES, assisted by Mr. SHIPLEY.—
Physical Chemistry. 8 Gr., 5 Se. Total 13.
- 12 ¹/₂hf. Asst. Professor BAXTER.—Photochemistry, including the use of Optical
Instruments in Chemistry. 4 Gr., 1 Se. Total 5.
- 7 ²/₃hf. Dr. G. S. FORBES.—Electrochemistry. 3 Gr., 1 G.S., 2 Se. Total 6.
- 13 ²/₃hf. Dr. G. S. FORBES.—Experimental Electrochemistry.
1 Gr., 1 Se. Total 2.
- 14 ¹/₂hf. Dr. G. S. FORBES.—Advanced Physical Chemistry. 4 Gr. Total 4.
- 16 ¹/₂hf. Mr. KELLEY.—The General Reactions of Organic Chemistry.
8 Gr., 3 Se., 1 Ju. Total 12.
- 17 ²/₃hf. Mr. KELLEY.—Special Topics in Advanced Organic Chemistry.
6 Gr., 2 Se., 3 Ju., 1 So. Total 12.

COURSES OF RESEARCH

- 20a. Professor RICHARDS.—Inorganic Chemistry, including Determination of
Atomic Weights. 2 Gr. Total 2.
- 20c. Dr. LATHAM CLARKE.—Organic Chemistry. 8 Gr. Total 8.
- 20d. Professor RICHARDS.—Physical Chemistry, including Electrochemistry.
4 Gr. Total 4.
- 20f. Asst. Professor BAXTER.—Inorganic Chemistry, including Determination
of Atomic Weights. 4 Gr. Total 4.

Engineering

Primarily for Undergraduates:—

- 1e. Mr. GAYLORD, and Messrs. DONAHUE and FORT.—Trigonometry, Algebra,
and Analytic Geometry.
1 G.S., 1 Se., 3 Ju., 2 So., 36 Fr., 1 Sp., 2 uC. Total 46.
- 1d ²/₃hf. Mr. GAYLORD.—Analytic Geometry.
5 So., 9 Fr., 1 Sp., 1 uC. Total 16.
- 1c. Asst. Professor HUNTINGTON, and Messrs. MOULTON and D. L. WEBSTER.
—Differential and Integral Calculus.
2 G.S., 1 Se., 11 Ju., 25 So., 3 Fr., 2 Sp., 2 uC. Total 46.
- 3a. Asst. Professors KENNEDY and A. E. NORTON, and Messrs. NINDE and
THOROGOOD.—Mechanical Drawing.
1 Gr., 2 G.S., 5 Se., 13 Ju., 21 So., 24 Fr., 1 Sp., 4 uC. Total 71.
- 3b ¹/₂hf. Asst. Professor A. E. NORTON and Mr. THOROGOOD.—Descriptive
Geometry. 2 G.S., 6 Se., 20 Ju., 22 So., 4 Fr., 1 Sp. Total 55.
- 3d ²/₃hf. Asst. Professor A. E. NORTON, and Messrs. NINDE and THOROGOOD.—
Mechanism. Study of Gearing and Mechanical Movements.
2 G.S., 6 Se., 16 Ju., 16 So., 2 Fr., 2 Sp. Total 44.
- 10a. Mr. MARKHAM.—Chipping, Filing, and Fitting.
2 Se., 6 Ju., 9 So., 1 Fr., 1 uC., 7 S.S. Total 26.

10b. Mr. MARKHAM. — Blacksmithing.

2 Se., 6 Ju., 10 So., 1 Fr., 8 S.S. Total 37.

10c. Mr. MARKHAM. — Pattern-making and Foundry Practice.

1 Se., 6 Ju., 7 So., 1 Fr., 6 S.S. Total 31.

10e. Mr. MARKHAM. — Machine Shop Practice.

1 Se., 5 Ju., 7 So., 1 Fr., 1 uC., 11 S.S. Total 36.

5b¹/₂f. Professor L. J. JOHNSON and Mr. NICHOLS. — Elementary Statics. Graphic and Algebraic Methods.

9 G.S., 4 Se., 27 Ju., 21 So., 6 Fr., 4 Sp., 2 uC. Total 73.

At Harvard Engineering Camp. Mr. H. U. RANSOM.

1 G.S., 4 Ju., 4 So., 1 Fr., 1 Sp., 1 uC., 1 S.S. Total 13.

5e¹/₂f. Asst. Professor HUNTINGTON and Mr. D. L. WEBSTER. — Elementary Kinematics and Kinetics.

4 G.S., 3 Se., 17 Ju., 15 So., 1 Fr., 2 Sp., 2 uC. Total 44.

At Harvard Engineering Camp. Mr. H. U. RANSOM.

1 Ju., 2 So., 1 Sp., 1 uC. Total 5.

*For Undergraduates and Graduates: —***4a. Asst. Professor HUGHES, assisted by Mr. C. F. EBERLY (Topographer, U. S. Geological Survey), Mr. MORRISON, and other assistants. — Plane and Topographical Surveying.**

2 G.S., 2 Se., 23 Ju., 28 So., 37 Fr., 2 uC., 1 Sp., 1 Me., 6 S.S. Total 102.

4c¹/₂f. Asst. Professor HUGHES, assisted by Mr. C. F. EBERLY. — Geodetic Surveying.

1 Ju., 1 So., 1 Sp., 2 S.S. Total 5.

4d. Asst. Professor HUGHES, assisted by Mr. H. U. RANSOM and other assistants. — Railroad Engineering (first course).

1 G.S., 2 Se., 12 Ju., 15 So., 17 Fr., 1 uC., 4 S.S. Total 52.

5a¹/₂f. Asst. Professor HUNTINGTON and Mr. D. L. WEBSTER. — Kinetics (second course).

5 G.S., 10 Se., 15 Ju., 1 So. Total 31.

5c¹/₂f. Professor HOLLIS and Mr. BEARD. — Elementary Resistance of Materials.

5 G.S., 12 Se., 24 Ju., 2 So., 1 Fr., 2 Sp., 1 uC. Total 47.

6a¹/₂f. Asst. Professor HUGHES and Mr. PAIGE. — Elementary Hydraulics.

8 G.S., 12 Se., 15 Ju., 1 So., 1 Sp. Total 37.

11a¹/₂f. Professor HOLLIS, and Messrs. MARKHAM and BEARD. — Steam Machinery (introductory course).

3 G.S., 13 Se., 37 Ju., 27 So., 6 Fr., 2 Sp. Total 88.

12b¹/₂f. Professor MARKS and Mr. WOLFARD. — Elements of Thermodynamics. Theory of Heat Engines.

10 G.S., 9 Se., 26 Ju., 1 So., 1 Sp. Total 47.

13a. Professor MARKS, assisted by Messrs. WOLFARD and DODDS. — Engineering Laboratory. A course in experimental methods.

8 G.S., 2 G.B., 12 Se., 11 Ju., 2 So., 1 Sp., 1 uC. Total 37.

14a. Asst. Professor KENNEDY and Mr. NINDE. — Machine Design (introductory course).

1 Gr., 2 G.S., 5 Se., 8 Ju., 1 So. Total 17.

16a. Professor KENNELLY, and Messrs. CRANE, J. W. DAVIS, and HEALEY. — Generation, Transmission, and Utilization of Electrical Energy (elementary course).

9 G.S., 1 G.B., 10 Se., 6 Ju., 1 So., 2 Sp., 1 uC. Total 30.

Primarily for Graduates:—

- 4e². Asst. Professor HUGHES and Mr. PAIGE. — Road Engineering.
5 G.S., 2 Se. Total 7.
- 4f¹. Asst. Professor HUGHES and Mr. PAIGE. — Railroad Engineering (second course). Problems in railroad construction, economics, and maintenance.
5 G.S., 5 Se. Total 10.
- 5f. Professor L. J. JOHNSON and Mr. NICHOLS. — Mechanics of Structures.
1 Gr., 5 G.S., 3 Se. Total 9.
- 5g¹. Professor HOLLIS. — Mechanics of Machinery and Boilers.
2 G.S., 2 Se., 1 Ju. Total 5.
- 6c². Asst. Professor HUGHES and Mr. PAIGE. — Hydraulics (third course).
Water Supply and Sewage Disposal. 8 G.S., 3 Se. Total 11.
- 6d¹. Asst. Professor HUGHES, and Messrs. SAFFORD and PAIGE. — Hydraulics (second course). Stream Flow; Measurements of Flow; Water Power.
8 G.S., 3 Se. Total 11.
- 7b. Professor SWAIN, Asst. Professor KILLAM, and Mr. NICHOLS. — Theory and Design of Structures of Wood, Stone, and Metal. 5 G.S., 3 Se. Total 8.
- 8a¹. Asst. Professor KILLAM. — Foundations, Masonry, and Fireproofing.
1 Gr., 4 G.S., 4 Se. Total 9.
- 12a². Professor MARKS and Mr. WOLFARD. — Efficiency and Economics of Heat Engines.
5 G.S., 3 Se. Total 8.
- 13b². Professor MARKS, assisted by Messrs. WOLFARD and DODDS. — Mechanical Engineering Laboratory.
2 G.S., 1 Se. Total 3.
- 14b¹. Professor HOLLIS, assisted by Mr. ORDWAY. — Machine Design (second course).
2 G.S., 1 Se. Total 3.
- 16b. Professor CLIFFORD. — Elements of Electrical Engineering (second course).
4 G.S. Total 4.
- 16j¹. Professor ADAMS and Mr. DOGGETT. — Direct Currents and Direct-Current Machinery.
6 G.S., 7 Se., 1 uC., 1 Sc. Total 15.
- 16k¹. Mr. CRANE and Mr. DOGGETT. — Direct-Current Machinery.
7 G.S., 7 Se., 1 uC., 1 Sc. Total 16.
- 16l². Professor CLIFFORD and Mr. J. W. DAVIS. — Alternating Currents.
5 G.S., 5 Se., 1 uC., 1 Sc., 1 Law. Total 13.
- 16m². Mr. CRANE and Mr. J. W. DAVIS. — Alternating-Current Laboratory.
5 G.S., 5 Se., 1 uC., 1 Sc. Total 12.
- 16n¹. Professor CLIFFORD and Mr. J. W. DAVIS. — Alternating-Current Machinery.
6 G.S., 1 Sp., 1 uC. Total 8.
- 16o¹. Professor ADAMS and Mr. DOGGETT. — Alternating-Current Machinery.
5 G.S. Total 5.
- 16p¹. Professor KENNELLY. — Electric Transmission and Distribution of Power.
2 Gr., 4 G.S., 1 Sp. Total 7.
- 17b². Professor KENNELLY. — Telegraphy and Telephony.
2 Gr., 1 G.S., 3 Se., 1 uC., 1 Sc. Total 8.

- 17c². Professor KENNELLY and Mr. HEALEY. — Illumination and Photometry.
1 G.S., 2 Se., 1 Sc. Total 4.
- 17d. Professor ADAMS and Mr. DOGGETT. — Dynamo Design. 3 G.S. Total 3.
- 18a². Professor HOLLIS, assisted by Mr. ORDWAY. — Power Station Design.
5 G.S., 1 Se. Total 6.
- 21². Professors SWAIN, HOLLIS, and KENNELLY. — Conference on Engineering Subjects.
8 G.S., 1 Se., 1 Sp., 1 Sc. Total 11.
- 22². Professor WYMAN. — Contracts and Specifications. General Principles of Common Law governing Construction Contracts.
14 G.S., 8 Se., 1 Ju., 1 So., 1 uC., 1 Sc. Total 26.

COURSES IN SPECIAL FIELDS

- 20a. Professor ADAMS. — Electrical Engineering Research. 1 G.S. Total 1.
- 20b. Professor CLIFFORD. — Electrical Engineering Research. 6 G.S. Total 6.
- 20c. Professor KENNELLY. — Electrical Engineering Research. 2 G.S. Total 2.
- 20e. Professor SWAIN. — Structures of Wood, Masonry, and Metal.
5 G.S. Total 5.
- 20m. Asst. Professor HUGHES. — Stream Flow and Water Power.
1 G.S. Total 1.

Forestry

None of the Courses in Forestry can be counted towards the degree of A.B. or S.B.

- 3a. Asst. Professor JACK. — Forest Botany. Systematic Study of Local Species in Autumn Characters. 11 G.S. Total 11.
- 1a. Asst. Professor FISHER. — Silviculture. Silvical Studies. Forest Description and Treatment. 11 G.S. Total 11.
2. Asst. Professor CARTER. — Forest Measurements. 11 G.S. Total 11.
- 1c. Asst. Professor JACK. — Silviculture. Forest Planting and Nursery Work.
9 G.S. Total 9.
- 7b. Asst. Professors FISHER and CARTER. — Forest Management. Construction of a Complete Working Plan. 7 G.S. Total 7.
- 7c. Asst. Professors FISHER and CARTER. — Forest Management. Logging Operations in the Harvard Forest. 8 G.S. Total 8.
- 3b. Asst. Professor JACK. — Forest Botany. American Species.
7 G.S. Total 7.
- 1b. Asst. Professor FISHER. — Silviculture. Forest Regions and Forest Influences. 9 G.S. Total 9.
4. Asst. Professor JACK. — Forest Protection. Diseases of Trees. Forest Fires. 7 G.S. Total 7.
- 7a. Asst. Professors FISHER and CARTER. — Forest Management. Theory of Forest Regulation and Valuation. 8 G.S. Total 8.
9. Mr. BAILEY. — Forest Products. 12 G.S. Total 12.
- 6a. Mr. CARY. — Lumbering. General Logging and Forest Engineering.
8 G.S. Total 8.
- 6b. Asst. Professor CARTER. — Forest Surveying and Timber Estimating.
8 G.S. Total 8.

Botany*Primarily for Undergraduates:—*

- 1 ¹/₂f. Asst. Professor OSTERHOUT, assisted by Mr. TUPPER and other assistants.
— Botany (introductory course).
2 Gr., 1 G.S., 7 Se., 12 Ju., 18 So., 76 Fr., 2 Sp., 7 uC. Total 125.
- 2 ¹/₂f. Professor THAXTER, assisted by Mr. COLLEY. — Morphology of Plants.
1 Gr., 3 G.S., 9 Ju., 9 So., 1 Fr., 1 Sp. Total 24.

For Undergraduates and Graduates:—

- 3 ¹/₂f. Professor JEFFREY, assisted by Mr. HEMENWAY. — General Morphology, Histology, and Cytology of Vascular Plants.
4 Gr., 1 G.S., 3 Se., 5 Ju., 1 So., 1 uC. Total 15.
- 6 ¹/₂f. Professor THAXTER, assisted by Mr. COLLEY. — The Bacteria, Mycetozoa, and Higher Fungi.
2 Gr., 1 G.S., 2 Se., 2 Ju., 3 So., 1 Fr., 1 uC. Total 12.
7. Asst. Professor FERNALD, assisted by Mr. DARLINGTON. — Classification and Distribution of Flowering Plants, with special reference to the Flora of New England and the Maritime Provinces.
4 Gr., 1 Se., 3 Ju., 3 So. Total 11.
- 8 ¹/₂f. Professor JEFFREY and Mr. BAILEY, assisted by Mr. BLADES. — Structure of Woods: microscopic features.
1 Gr., 10 G.S. Total 11.
- 10 ³/₂f. Professor JEFFREY, assisted by Mr. HEMENWAY. — Special Morphology of the Higher Vascular Plants, the Conifers, Gnetales and Angiosperms.
3 Gr., 2 G.S., 1 Se., 3 Ju., 1 So. Total 10.
- 11 ³/₂f. Professor W. E. CASTLE and Asst. Professor EAST. — Variation, Heredity, and the Principles of Animal and Plant Breeding. (See Zoölogy 11 ³/₂f.)
3 G.S., 3 Se., 2 Ju., 3 So. Total 11.
13. Asst. Professor OSTERHOUT and an assistant. — Plant Physiology.
3 Gr., 2 G.S. Total 5.

Primarily for Graduates:—

- 12 ³/₂f. Asst. Professor EAST. — Variation and Heredity. 3 G.S. Total 3.

COURSES OF RESEARCH

- 20a. Professor JEFFREY. — Structure and Development of Vascular Plants.
4 Gr. Total 4.
- 20b. Professors FARLOW and THAXTER. — Structure and Development of Cryptogams.
5 Gr. Total 5.
- 20d. Asst. Professor FERNALD. — Researches in Geographic Botany.
2 Gr., 1 G.S. Total 3.
- 20e. Asst. Professor OSTERHOUT. — Researches in Plant Physiology.
2 Gr., 1 G.S. Total 3.
- 20f. Asst. Professor EAST. — Variation, Heredity, and the Principles of Plant Breeding.
1 Gr., 3 G.S. Total 4.

Zoölogy*Primarily for Undergraduates : —*

1 ¹/_{hf}. Professor G. H. PARKER, Mr. E. C. DAY, and other assistants. — Zoölogy (elementary course).

3 Gr., 11 Se., 8 Ju., 28 So., 69 Fr., 5 Sp., 6 uC. Total 130.

2 ¹/_{hf}. Professor W. E. CASTLE and Mr. DETLEFSEN. — Morphology of Animals.

1 Gr., 7 Ju., 7 So., 7 Fr., 1 uC. Total 23.

For Undergraduates and Graduates : —

3. Asst. Professor H. W. RAND and Mr. LAURENS. — Comparative Anatomy of Vertebrates.

3 Gr., 3 Se., 5 Ju., 3 So., 1 Fr. Total 15.

4 ¹/_{hf}. Asst. Professor H. W. RAND and Mr. BOYDEN. — Microscopical Anatomy.

1 Gr., 1 Se., 1 Ju., 1 So., 1 Fr. Total 5.

5a ¹/_{hf}. Professor MARK, Asst. Professor H. W. RAND, and Mr. KORNHAUSER. — Embryology of Vertebrates. Early Stages of Development.

1 Se., 1 Ju., 1 So. Total 3.

11 ¹/_{hf}. Professor W. E. CASTLE and Asst. Professor EAST. — Variation, Heredity, and the Principles of Animal and Plant Breeding.

3 G.S., 3 Se., 2 Ju., 3 So. Total 11.

12 ¹/_{hf}. Professor MARK and Mr. KORNHAUSER. — Cytology, with special reference to Heredity.

3 Gr. Total 3.

Primarily for Graduates : —

7a ¹/_{hf}. Professor WHEELER and Mr. BRUES. — Morphology and Classification of Insects.

4 Gr., 2 G.S., 1 Se., 2 Ju., 1 Fr. Total 10.

7b ¹/_{hf}. Professor WHEELER and Mr. BRUES. — Habits and Distribution of Insects.

2 Gr., 2 G.S., 1 Se., 2 Ju., 1 Fr. Total 8.

7c ¹/_{hf}. Mr. BRUES. — Practical Entomology.

2 G.S., 2 Se. Total 4.

†14b ¹/_{hf}. Professor G. H. PARKER. — The Structure and Functions of Central Nervous Organs.

7 Gr., 3 G.S., 2 Ju. Total 12.

17 ¹/_{hf}. Asst. Professor H. W. RAND. — Experimental Morphology. The Form-determining Factors in Development and Growth.

2 Gr., 1 G.S. Total 3.

COURSES OF RESEARCH

20a. Professor MARK. — Embryology.

1 Gr. Total 1.

20b. Professor MARK. — Cytology, with special reference to Heredity.

2 Gr. Total 2.

20c. Professor G. H. PARKER. — The Structural and Functional Basis of Animal Reactions.

5 Gr. Total 5.

20e. Asst. Professor H. W. RAND. — Developmental and Growth Processes. Comparative Anatomy of Vertebrates.

1 Gr. Total 1.

20g. Asst. Professor H. W. RAND. — Experimental Morphology.

1 Gr. Total 1.

20d. Professor W. E. CASTLE. — Variation, Heredity, and the Principles of Animal Breeding.

3 G.S. Total 3.

20f. Professor WHEELER. — Economic Entomology.

4 G.S. Total 4.

Geology

GEOLOGY AND GEOGRAPHY

GENERAL GEOLOGY

Primarily for Undergraduates:—

4 ¹/_hf. Asst. Professor WOODWORTH, assisted by Messrs. LAWRENCE and WIGLESWORTH. — Introduction to Geology. Dynamical and Structural Geology.

1 Gr., 6 G.S., 16 Se., 32 Ju., 28 So., 22 Fr., 1 Sp., 2 uC. Total 108.

5 ²/_hf. Asst. Professor WOODWORTH, assisted by Mr. LAHEE. — Introduction to Historical Geology.

1 Se., 10 Ju., 9 So., 9 Fr. Total 29.

For Undergraduates and Graduates:—

8 ¹/_hf. Asst. Professor WOODWORTH, assisted by Mr. SEDGWICK SMITH. — Advanced General Geology.

2 Gr., 7 G.S., 6 Se., 3 Ju., 2 uC. Total 20.

16 ³/_hf. Asst. Professor WOODWORTH. — Glacial Geology.

1 Gr., 1 G.S., 1 Ju., 1 uC. Total 4.

12 (formerly 22). Mr. LAHEE. — Geological Field Work in the Vicinity of Boston.

1 Gr., 2 G.S., 2 Se. Total 5.

Primarily for Graduates:—

20c. Professors DAVIS, WOLFF, and H. L. SMYTH, and Asst. Professor WOODWORTH. — Geological Investigation in the Field and Laboratory.

1 Gr. Total 1.

ECONOMIC GEOLOGY

For Undergraduates and Graduates:—

18 ²/_hf. Professor WOLFF, and Asst. Professors WOODWORTH and PALACHE, and an assistant. — Economic Geology of the Non-Metalliferous Substances.

1 Gr., 2 G.S., 1 Se., 2 Ju., 1 Fr., 1 Sp., 1 uC. Total 9.

GEOGRAPHY

Primarily for Undergraduates:—

A ¹/_hf. Asst. Professor D. W. JOHNSON and Mr. REED. — Physical Geography (introductory course).

2 Gr., 1 G.S., 3 Se., 2 Ju., 10 So., 23 Fr., 1 Sp., 2 uC. Total 44.

For Undergraduates and Graduates:—

6 ²/_hf. Asst. Professor D. W. JOHNSON. — Physiography of the United States.

1 Gr., 3 Se., 2 Ju., 3 So., 2 Fr., 1 uC. Total 12.

10 ³/_hf. Asst. Professor D. W. JOHNSON. — Geomorphology.

1 Gr., 1 Ju., 1 So., 1 uC. Total 4.

Primarily for Graduates:—

20a. Professor DAVIS and Asst. Professor D. W. JOHNSON. — Physiography (research course).

6 Gr., 1 R. Total 7.

METEOROLOGY AND CLIMATOLOGY

Primarily for Undergraduates:—

B²hf. Professor WARD, assisted by Mr. REED. — Meteorology (elementary course). 1 Gr., 2 G.S., 4 Se., 6 Ju., 14 So., 33 Fr., 4 uC. Total 64.

For Undergraduates and Graduates:—

1 *hf.* Professor WARD. — Climatology of North America. 2 Se., 3 Ju. Total 5.
 19 *hf.* Professor WARD. — General Climatology. 1 Se., 2 Ju., 1 uC. Total 4.

Primarily for Graduates:—

20c. Professor WARD. — Climatology (research course). 1 Gr. Total 1.

Mineralogy and Petrography

Primarily for Undergraduates:—

2. Asst. Professor PALACHE, assisted by Mr. R. E. SOMERS. — Mineralogy (including Crystallography, Physical and Chemical Mineralogy, and Descriptive Mineralogy). 1 Gr., 3 G.S., 2 Se., 10 Ju., 4 So., 1 Fr. Total 21.

For Undergraduates and Graduates:—

12. Professor WOLFF, assisted by Mr. ROBERT HARVIE. — Petrography. 2 Gr., 8 G.S., 4 Se., 1 Fr. Total 15.

Primarily for Graduates:—

14 *hf.* Professor WOLFF. — Advanced Petrography. 1 Gr., 8 G.S., 1 Se., 1 Sp. Total 11.

Mining and Metallurgy

Primarily for Undergraduates:—

A¹hf. Professor PETERS and Mr. WEEKS. — Introduction to Mining and Metallurgy. 43 Ju., 48 So., 55 Fr., 2 Sp., 4 uC. Total 152.

B²hf. Professors SAUVEUR and PETERS, assisted by Messrs. BOYLSTON and FREEMAN. — General Metallurgy. 5 G.S., 1 Se., 6 Ju., 7 So., 5 Fr. Total 24.

1 *hf.* Professor H. L. SMYTH and Asst. Professor RAYMER, assisted by Mr. WEEKS. — Elements of Mining. Prospecting and Exploring; Breaking Ground; Hydraulic and Open-pit Mining; Stamp-milling and Ore-concentration. 4 G.S., 5 Se., 13 Ju., 6 So., 6 Fr., 1 uC. Total 35.

2. Professor H. L. SMYTH, Asst. Professor GRATON, and Mr. WEEKS. — Ore-deposits. Origin and occurrence. 1 Gr., 6 G.S., 1 Se., 5 Ju., 1 uC. Total 14.

3 *hf.* Asst. Professor RAYMER, assisted by Mr. FREEMAN. — Fire Assaying. 4 G.S., 3 Se., 3 Ju., 2 So., 1 Fr. Total 13.

4 *hf.* Asst. Professor C. H. WHITE, assisted by Mr. KINGSBURY. — Metallurgical Chemistry. The Analysis of Ores. 2 G.S., 3 Ju., 1 Fr. Total 6.

For Undergraduates and Graduates:—

7¹. Mr. WEEKS. — Metal and Coal Mining; Exploitation. 4 G.S., 5 Se. Total 9.

- 8 ¹/₂f. Asst. Professor RAYMER. — Mining Plant. 5 G.S., 4 Se. Total 9.
10. Mr. WEEKS. — Mining. The study of mining operations.
2 G.S., 4 Ju., 1 So. Total 7.
- 11 ¹/₂f. Professor SAUVEUR, assisted by Mr. BOYLSTON. — Metallurgy of Iron and Steel. 8 G.S., 8 Se., 7 Ju., 3 So., 1 Fr., 1 Sp., 1 uC. Total 24.
- 12 ¹/₂f. Professor SAUVEUR, assisted by Mr. BOYLSTON. — Metallography.
1 Sp. Total 1.
- 14 ¹/₂f. Professor PETERS, assisted by Messrs. WEEKS and KINGSBURY. — Metallurgy of Copper, Lead, Zinc, and the Minor Metals, and of the Precious Metals in connection with Copper and Lead. 8 G.S., 1 uC. Total 9.
- 15 ¹/₂f. Professor PETERS. — Metallurgy of Zinc, Nickel, Tin, Mercury, and the Minor Metals. 1 G.S., 1 Se., 1 Ju., 1 uC. Total 4.
- 17². Asst. Professor RAYMER. — Ore-dressing, Concentration, and Milling.
4 G.S., 4 Se. Total 8.
19. Asst. Professor C. H. WHITE. — Metallurgical Chemistry (advanced course).
1 Ju., 1 Sp., 1 uC. Total 3.
- Primarily for Graduates: —*
- 21¹. Asst. Professor C. H. WHITE. — Leaching Processes for Gold and Silver Ores. 9 G.S. Total 9.
- 22 ¹/₂f. Professor PETERS. — Advanced Course in the Metallurgy of Copper, Lead, and the Minor Metals. 2 G.S. Total 2.
- 24². Professor H. L. SMYTH. — Mine Examination and Reports. 9 G.S. Total 9.
- 26¹. Asst. Professor RAYMER. — Mine Surveying. 9 G.S. Total 9.
- 28 ¹/₂f. Mr. LAHRE. — Geological Surveying. 3 G.S., 4 Se. Total 7.
- 30². THE INSTRUCTORS IN THE DIVISION. — Mining and Metallurgical Projects and Design. 9 G.S. Total 9.

COURSES OF RESEARCH

- 20a. Professor SAUVEUR, assisted by Mr. BOYLSTON. — Metallurgy and the Physics of Metals. 1 G.S. Total 1.
- 20b. Asst. Professor GRATON. — Problems in ore-deposits.
1 Gr., 7 G.S., 1 Se., 1 Sp. Total 10.
- 20c. Professor PETERS. — Problems in Metallurgy. 1 G.S. Total 1.

Anthropology

Primarily for Undergraduates: —

1. Drs. FARABEE and TOZZER, assisted by Dr. HOWE. — General Anthropology.
1 Gr., 1 G.S., 11 Se., 15 Ju., 35 So., 6 Fr., 3 Sp., 3 uC. Total 75.

For Undergraduates and Graduates: —

5. Asst. Professor DIXON. — American Archaeology and Ethnography.
2 Gr., 2 Se., 4 Ju., 1 Fr., 2 Sp. Total 11.
- 4 ¹/₂f. Dr. FARABEE. — Prehistoric European Archaeology and European Ethnography. 1 Se., 1 Sp. Total 2.
- 7 ¹/₂f. Asst. Professor DIXON. — Ethnography of Oceania. 1 Se. Total 1.

Primarily for Graduates :—

2 ¹ / ₂ f. Dr. FARABEE. — Somatology.	2 Gr., 1 Se., 1 Ju., 1 Sp.	Total 5.
9 ¹ / ₂ f. Dr. TOZZER. — Archaeology and Hieroglyphic Systems of Central America.	3 Gr., 1 Se., 1 Ju., 1 Sp.	Total 6.
10 ² / ₃ f. Dr. TOZZER. — Archaeology and Ethnography of Mexico.	3 Gr., 1 Se., 1 Ju., 1 Sp.	Total 6.

COURSES OF RESEARCH

†20a. Asst. Professor DIXON. — American Archaeology and Ethnology.	1 Gr.	Total 1.
†20b. Dr. FARABEE. — Advanced Somatology.	2 Gr.	Total 2.
†20c. Asst. Professor DIXON. — Studies in American Languages.	1 Gr.	Total 1.
20e. Dr. TOZZER. — Central American and Mexican Hieroglyphic and Picture Writing.	1 Gr., 1 Sp.	Total 2

Physiology

1. Asst. Professor DARLING, and Drs. PROVANDIE, BACON, HAPGOOD, and GOODRIDGE. — Elementary Anatomy and Physiology. Personal Hygiene. Emergencies. 18 Se., 40 Ju., 50 So., 63 Fr., 4 Sp., 5 uC. Total 180.

In accordance with the vote of the President and Fellows whereby the Faculty may under certain conditions authorize a Doctor of Philosophy or a Doctor of Science to give instruction gratuitously or for such fees as he may himself collect, Günther Jacoby, Ph.D., was authorized to give in the first half-year a course of lectures on Schopenhauer; and Karl Schmidt, Ph.D., in the second half-year, a course of lectures on "The Logical Structure of Mathematical and Inductive Systems."

The Faculty has adopted the custom of inviting those visiting professors who conduct Harvard courses to be guests at its meetings.

With the Freshman Class that entered College in 1910 the new scheme requiring of every student a certain amount of work in each of four elective groups and work of a reasonably advanced character in one of the four, was put into effect. With it came the use of the whole Faculty and of many instructors outside of the Faculty as advisers. It is too early to judge the degree of success in the new scheme. Many persons doubtless believe that Group I contains too much and Group IV too little; scarcely any two persons would agree about all the details in the plan, and some of these details must be worked out further or they will prove confusing: but, with every deduction, the plan, in theory sound, is in practice full of promise. Incidentally it

tends to familiarize College teachers with the Elective Pamphlet, with the rules of the College Office, and with the work of their colleagues, giving "concentration" along with "distribution" to their dealings with the students. The Elective Pamphlet, by vote of the Faculty, has been rearranged in accordance with the four-group system.

When the undergraduate part of the Lawrence Scientific School was merged in Harvard College, no specific arrangement was made for the degree of S.B. with Distinction. In November, 1911, the Faculty voted "That the degree with distinction be open to candidates for the degree of S.B."

In April Professor C. P. Parker, Secretary of the Committee on the Choice of Electives, presented the following report, and moved that it be approved by the Faculty and sent to all Chairmen of Divisions, Departments, and Committees administering Degrees with Distinction: —

The Committee reports that there is need of more general agreement as to the quality of work required for the Degree with Distinction. The degree does not indicate knowledge of a professional character, but ought to be within reach of an undergraduate of good ability as part of his general education. The Degree with Distinction carrying a *cum laude* should, in the opinion of the Committee, indicate that the candidate has shown by his marks and other tests that he is of *B* quality. The higher grades of distinction should indicate a certain amount of brilliancy, and not merely diligence in study. A *magna cum laude* should indicate that a man is, in the opinion of the Committee in charge, of *A* quality. The Faculty has already voted (November 15, 1910,) that for the degree of A.B. *summa cum laude* a candidate should show marked ability not only in his special field, but also in studies outside his field of distinction. (The recommendation for the degree of A.B. *summa cum laude* must, however, come from the Division in which he specializes.) The Committee on the Choice of Electives believes that there should be a general agreement of the Faculty on some such standard as the foregoing.

The motion was carried.

The most important act of the Faculty in the whole academic year — and its most important act in many years — concerned admission to Harvard College. At the first meeting in the autumn the Faculty received a communication from the Board of Overseers: —

Voted, to transmit to the Faculty of Arts and Sciences the Report of the Committee on the Relation of the University to Secondary Schools, presented to the Board of Overseers on June 29, 1910, with the request that they consider the same.

REPORT OF THE COMMITTEE ON THE RELATION OF THE
UNIVERSITY TO SECONDARY SCHOOLS

TO THE BOARD OF OVERSEERS OF HARVARD COLLEGE:—

The Committee on the Relation of the University to Secondary Schools desire to call the attention of the Board of Overseers to the fact that the College draws very few students from public high schools beyond those of Eastern Massachusetts. The Committee also desire to express their belief that changes now being made in the curricula of public high schools throughout the country for the purpose of satisfying community needs will result in decreasing yet more the connection between those schools and Harvard College.

In view, therefore, of the present relations between the College and public high schools, the Committee respectfully suggest that the Board of Overseers request the Faculty of Arts and Sciences to consider the present requirements for admission with a view to determining whether changes may not be made in those requirements which will bring the College into closer relations with public high schools throughout the country.

The Committee desire to express their conviction that it is of the highest importance that the College should be more accessible to graduates of public high schools in all parts of the country, and that the requirements for admission should be so defined as to promote relations between such schools and the College which will enable good students in the one to pass freely into the other.

ROBERT GRANT,
LOUIS A. FROTHINGHAM,
GEORGE WIGGLESWORTH,
JOHN G. HART,
WILLIAM B. MUNRO,
JOSEPH WARREN,
ALFRED ERNEST STEARNS,
WILLIAM ORR,
GEORGE P. HITCHCOCK.

Harvard requirements for admission have had wide influence and, for the most part, good influence; but that they have warped the curricula of some schools is scarcely questioned, and that they have cut off from the College many of the ablest and best pupils in strong high schools, especially in those of the West, is not questioned at all. The trouble has been, not in the height of their standard, which was helpful, but rather in the eccentricity of their standard, which made it impossible for a boy outside of Harvard preparatory schools to meet the requirements without special instruction or without self-preparation in subjects no better than those of the school curriculum as tests of power. The comparatively small cost of living at state universities, admission by

certificate, local pride, and marked improvement in local opportunity have sent to the state universities boys whose presence in Harvard College would be highly advantageous both to the College and to themselves. Even slight acquaintance with the situation shows the mistake under which Harvard College has been laboring. No high school can adapt its curriculum to the requirements of any one university, unless it be a state university. No boy from a distance can be expected before he knows any college to pick out that college far away whose requirements for admission offer most obstacles, unless the obstacles are of a stimulating kind. Convince a boy that the hardest thing is the best thing, and he will do it. Thus there have always been boys whom no persuasion could keep away from the Harvard admission examinations; but most boys have acquired no conviction on this subject strong enough to resist surrounding influence. Though no friend of Harvard College wishes to make admission easy, every friend who has known the situation in the last few years has longed for some change whereby the ablest and the best-trained boys in any good high school shall not find that their way to Harvard College is blocked by an eccentricity of requirement which throws some doubt on the wisdom of the University as a whole.

The communication from the Overseers was referred to a committee of the Faculty composed of Professor Baker (Chairman), Professor E. H. Hall, Professor von Jagemann, Professor G. H. Parker, Professor C. H. Moore, Professor Ropes, Professor Munro, Mr. J. G. Hart, and Mr. W. R. Castle, Jr. This committee brought forward the new scheme of admission, expounded on page 25, and secured its adoption.

Too much credit cannot be given to this committee of the Faculty. No committee within my recollection has had harder steering, and few have steered so well.

The new scheme meets certain great needs — simplicity, avoidance of waste, and such natural connection with strong schools as shall enable a boy of vigorous mind to come to Harvard normally. It is thus a long step in the economic administration of all that relates school to college. Incidentally it indicates a policy for want of which the Faculty has long worked at a disadvantage. As the Faculty has grown larger and more unwieldy, it has proved quite unable to settle details with wise efficiency; yet it has often adhered to its old feeling of responsibility for details, and has clouded its debates on general policy with every conceivable small side issue. In the new scheme

of admission it has enunciated the general principle of entrusting to a committee of experts — or of men who must soon become experts — every administrative detail. By adopting a scheme firm in big things and flexible in little ones, it has shown its desire to rid itself of detailed formalism and to maintain the only policy by which a Faculty of its size can live.

L. B. R. BRIGGS, *Dean.*

THE COLLEGE

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — As Acting Dean of Harvard College for the academic year 1910–11 I have the honor of submitting to you a report on Harvard College, along the lines established by Dean Hurlbut in his several annual reports.

The number of students in the College at the time the lists were compiled for the Catalogue of 1910–11 was two thousand two hundred and seventeen, divided as follows:—

Seniors	382
Juniors	482
Sophomores	516
Freshmen	671
Total number of Undergraduates	2,051
Special Students	75
Unclassified Students	91
Total	2,217

Compared with the figures at the corresponding time of the preceding year these show a loss of forty-eight:—

	Gain	Loss
Seniors	15	
Juniors		28
Sophomores	17	
Freshmen	7	
Special Students		51
Unclassified Students		18
	39	87
Net gain		48

During the year the following students died:—

Arthur Louis Max Dejonge, '14, . . . February 15, 1911.
 Sherman Pratt Parsons, Unclassified, . . . May 13, 1911.
 Arthur Elwin Smith, '11, June 27, 1911.

Four hundred and fourteen candidates—sixteen in February and three hundred and ninety-eight in June—received the degree of Bachelor of Arts in course. Of these, two hundred and eighty-eight were registered as Seniors. The registration of the others is shown in the following table:—

On leave of absence all the year	22
On leave of absence first half-year	1
On leave of absence second half-year	10
Graduate Students in Arts and Sciences	9
Graduate Students in Applied Science	7
Registered in the Law School	16
Registered in the Medical School	5
Registered in the Business School	9
Registered in the Junior Class	16
Registered in the Sophomore Class	1
Registered in the Freshman Class	2
Registered as a Special Student	1
	<u>99</u>
To be designated "as of 1912" in the <i>Quinquennial</i>	27
	126

Forty-one candidates received the degree of Bachelor of Science. Their registration is indicated in the next table:—

Senior Class	29
Junior Class	4
Freshman Class	2
	<u>35</u>
Graduate School of Applied Science	1
	<u>36</u>
On leave of absence all the year	4
On leave of absence second half-year	1
	<u>41</u>

The next two tables show the losses and gains in the three lower classes between November, 1910, and the latter part of October, 1911:—

	November, 1910	Loss	Gain	November, 1911
Class of 1912 . .	(Juniors) 482	180	70	(Seniors) 372
Class of 1913 . .	(Sophomores) 516	99	118	(Juniors) 535
Class of 1914 . .	(Freshmen) 671	228	56	(Sophomores) 499
		<u>507</u>	<u>244</u>	

Net loss in the three classes between Nov., 1910, and Nov., 1911, 263
(31 less than in 1910).

	Class of 1912	Class of 1913	Class of 1914	Total for three classes
LOSSES				
Left College before the end of the year . .	15	15	86	66
Left College at the end of the year	126	21	26	173
Were "dropped" and left College	19	11	22	52
Entered a lower class	17	24	102	143
Entered a higher class	8	28	42	78
Total loss	180	99	228	507
GAINS				
From higher classes	8	17	24	49
From lower classes	38	37	..	70
Newly admitted	29	64	32	125
Total gain	70	118	56	244
Net loss	110	..	172	263
Net gain . . . . .	..	19	..	..

The next table shows the losses and gains in the number of Special Students since December, 1910:—

*In attendance, December, 1910	75
Left College before the end of the year	10
Left College at the end of the year	81
Entered a College class	10
Total loss	51
Reentered College in 1911 as Special Students	24
Newly admitted	20
Total	44
Net loss	31

The Freshman Class in 1911-12 numbers seven hundred and forty, a gain of sixty-nine over 1910-11. The number admitted by examination is ninety-three more than that in 1910:—

Admitted by examination in 1911	598
Admitted by examination before 1911	25
Admitted from another college	6
†Admitted from a higher class	115
Admitted from the Special Students	1
Total	740

* Catalogue figures of 1910-11.

† Dropped from 1914: by low record, 15; by admission conditions, 64; by both record and conditions, 23. Readmitted Freshmen: formerly in 1911, 1; formerly in 1912, 0; formerly in 1913, 4; formerly in 1914, 8. Total 116.

The Assistant Dean makes the following statement in regard to the Class of 1914: "During the year 1910-11 one hundred and four Freshmen were at one time or another on probation. Of these seventy-four came from private schools and thirty from public schools. Fourteen of those on probation were dropped out of College at the end of the year because they failed to win their promotion. In addition to these fourteen, five had their connection severed because they failed either to pass three courses or to get at least one grade of C. Eighteen who were not on probation were dropped for having failed to pass three courses with at least two satisfactory grades. On the whole, this record is distinctly better than it was during the preceding year."

In June, 1911, admission examinations under the new plan were held for the first time. As previously set forth, this plan does not take the place of the old plan; it provides another method of admission for good scholars.

To be admitted to Harvard College, a candidate

- (1) Must present evidence of an approved school course satisfactorily completed; and
- (2) Must show in four examinations, as explained below, that his scholarship is of a satisfactory quality.

SCHOOL RECORD

A candidate must present to the Committee on Admission evidence of his secondary school work in the form of an official detailed statement showing

- (a) The subjects studied by him and the ground covered.
- (b) The amount of time devoted to each.
- (c) The quality of his work in each subject.

To be approved, this statement must show

- (a) That the candidate's secondary school course has extended over four years.
- (b) That his course has been concerned chiefly with languages, science, mathematics, and history, no one of which has been omitted.
- (c) That two of the studies of his school programme have been pursued beyond their elementary stages, i. e., to the stage required by the present advanced examinations of Harvard College or the equivalent examinations of the College Entrance Examination Board.

THE EXAMINATIONS

If the official detailed statement presented by the candidate shows that he has satisfactorily completed an approved secondary school course, he may present himself for examinations in four subjects as follows:—

- (a) English.
- (b) Latin, *or*, for candidates for the degree of S.B., French or German.
- (c) Mathematics, or Physics, or Chemistry.
- (d) Any subject (not already selected under (b) or (c)) from the following list:—

Greek	History	Physics
French	Mathematics	Chemistry
German		

These four examinations must be taken at one time, either in June or in September.

The following figures in regard to the candidates for admission under the new plan may be of interest.

Candidates whose high school records were not approved .	46
Candidates rejected	57
Candidates admitted	83
Total	186

In June and September, 1911, 83 boys were admitted to the Class of 1915 under the new plan. Their preparatory schools were as follows:—

ALABAMA :	MASSACHUSETTS :
Marion, Marion Institute 1	Boston, Latin School 3
COLORADO :	Cambridge, High and Latin School 1
Colorado Springs High School . . 1	Concord, High School 1
CONNECTICUT :	Danvers, Holten High School . . 1
Lakeville, The Hotchkiss School 3	Fall River, High School 1
DISTRICT OF COLUMBIA :	Fitchburg, High School 1
Washington, Central High School 1	Hingham, High School 1
Washington, Western High School 2	Hyde Park, High School 1
GEORGIA :	Lawrence, High School 2
Augusta, Academy of Richmond	Lowell, High School 1
County 1	Malden, High School 1
ILLINOIS :	Mount Hermon, Mount Hermon
Chicago, University High School 1	School 1
La Grange, Lyons Township High	New Bedford, High School . . . 1
School 1	Newburyport, High School . . . 1
KENTUCKY :	Quincy, High School 1
Louisville, Male High School . . 1	Rockland, High School 1
MAINE :	Roxbury, High School 1
Skowhegan, High School 1	Springfield, Central High School 1
South Berwick, Berwick Academy 1	Stoneham, High School 1
MASSACHUSETTS :	Waltham, High School 1
Belmont, High School 1	Weymouth, High School 1
Boston, English High School . . 6	MICHIGAN :
Boston, High School of Com-	Detroit, Central High School . . 1
merce 3	

MINNESOTA :		NEW YORK :	
Winona, High School	1	New York, Horace Mann High School	1
MISSOURI :		Rochester, West High School . .	1
Cape Girardeau, State Normal School	1	OHIO :	
Kansas City, Westport High School	1	Cincinnati, Franklin School . .	1
NEBRASKA :		Cleveland, Central High School	1
Harvard, High School	1	Cleveland, University School . .	1
NEW JERSEY :		PENNSYLVANIA :	
Hammonton, High School	1	Allegheny, High School	1
Montclair, High School	3	Bradford, High School	1
Newark, Barringer High School	1	Philadelphia, Central High School	1
NEW YORK :		Pittsburgh, High School	1
Baldwin, High School	1	VERMONT :	
Brooklyn, Boys' High School . .	2	Brattleboro, High School	1
Buffalo, Central High School . .	1	VIRGINIA :	
Buffalo, Masten Park High School	1	Roanoke, High School	1
Buffalo, Nichols School	1	WASHINGTON :	
Elmira, Elmira Free Academy . .	1	Seattle, Broadway High School . .	2
Fulton, High School	1	Tacoma, High School	1
Hudson Falls, High School	1	WISCONSIN :	
New York, Ethical Culture School	1	Milwaukee, West Division High School	1

E. H. WELLS, *Acting Dean*

ATHLETIC SPORTS

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — As Chairman of the Committee on the Regulation of Athletic Sports I have the honor of making a report for the academic year 1910–11.

Assistant Dean Castle took the place of Dean Hurlbut, who was on leave of absence throughout the academic year. Otherwise the graduate membership of the Committee was unchanged. The undergraduate members were Roger W. Cutler, 1911, Herbert Jaques, 1911, and Heyliger de Windt, 1912. Paul Withington, 1909, served as Assistant Graduate Treasurer throughout the academic year. He has exceptional knowledge of athletic sports and of present athletic conditions in the University. He has, also, the confidence of both officers and students. The Advisory Committee on Baseball was formed to give our players the benefit of the best Harvard tradition and the best Harvard knowledge. Dr. E. H. Nichols, 1886, was Chairman; Barrett Wendell, Jr., 1901, and Dr. Channing Frothingham, Jr., 1902, were appointed with him; and to these were added, *ex-officio*, Mr. Garcelon and Captain C. B. McLaughlin. On the recommendation of this Advisory Committee, Dr. Frank J. Sexton was engaged as coach for two years.

The Committee on the Regulation of Athletic Sports, though unable to bind future committees, expressed a willingness to coöperate with the Trustees of the Harvard Union in an addition to the Harvard Union Building. On February 21st it voted:—

That it is the sentiment of this Committee that after the balance due for the completion of the Stadium has been paid in full, this Committee is willing to appropriate, each year, a sum not exceeding \$2500 towards the repayment of the cost of a building to be built by the Union, and to be available for general athletic purposes, and now planned to be used by the Varsity Club; such payment in no event to exceed one-third of the amount at the disposal of the Committee for general athletic purposes in any one calendar year; such payments to continue until the sum of \$25,000 has been so appropriated by this Committee. This action to be submitted to the Corporation, and if disapproved by them, to be void, and to be further subject to agreement with the Trustees of the Union as to the description and nature of the building to be built and the limitation of its purposes.

The addition to the Union will be built as a memorial to Francis Hardon Burr, 1909, and will be paid for, in great part, by money given for that purpose.

The class in general athletics for beginners was successfully conducted by Mr. Garcelon and Mr. Withington. It can no longer be called an experiment; it is a great opportunity for those who need to strengthen their bodies and to ventilate their minds.

In April the Committee authorized an expense of \$1,000, for tennis courts near the Medical School, since the use of the courts on the Soldier's Field and Jarvis Field by medical students is impracticable.

In the four major sports Harvard University teams won a reasonable share of victories. The football score of 0 to 0 against Yale was almost universally regarded as a defeat for Harvard, since Harvard was believed to have a stronger team than Yale and the strongest team in many years. The record of the track team was sad: Harvard not only lost to Dartmouth and Yale, but was distressingly weak at the intercollegiate games, qualifying only six men and winning only six points and not a single first place. The crews have sustained the reputation of Harvard crews in the last few years. The baseball team, with mediocre material and experimental pitchers, played and won its first Yale game at New Haven and won again at Cambridge, rendering a third game unnecessary. The players were drilled and disciplined with strictness and intelligence; the men who directed them were masters of the game to whom an earnest player could not but respond.

The fundamental question whether baseball is a fit game for college students cannot be answered until those in charge of the game make clear what is and what is not baseball. A recent writer for the *American Magazine*, Mr. Hugh S. Fullerton, has taken the bull by the horns: " 'Sportsmanship,' " he says, "is a relative quantity"; and later, "Almost anything is ethical and proper in baseball that will win games except maiming or injuring opponents, playing for a personal record rather than for the team, and 'laying down.' "

Again Mr. Fullerton says, —

"Fixing" the grounds so as to give the home team the advantage and handicap the visiting players is the commonest form of trickery, yet in professional ball it is not considered wrong, any more than a commander of a defensive army would consider it wrong to prepare breast-works to meet an enemy. . . . There probably is not a major or minor

league grounds in the country on which the home players have not the advantage, and visiting teams are forced to be on the alert from the moment they enter a field to discover, if possible, what they are up against.

Still again, —

If a manager has a staff of tall, overhand pitchers the pitcher's box is a mound, sometimes more than a foot high, to add to the angle the ball must take from the overhand pitcher's hand to the plate. If the team has a pitching force of short, underhand or side-arm pitchers, the slab is level with the rest of the diamond, or lower.

One of the best examples of "doping" grounds to favor the resident team was the Baltimore grounds, during the epoch of McGraw, Keeler, Kelley, Jennings, and Robinson, — all great baseball generals. The team was composed of fast men, several of them left-handed batters and good bunters. The players were extremely fast going to first base and they ran the bases well after reaching that vantage point. From the stands the grounds looked much like all other grounds — but they did not look that way to the players. The base lines and portions of the infield had been filled in with a concretelike substance, which, when dampened and tamped down hard, was as fast and springy almost as gutta percha. The first base was quite two feet lower than the home plate, second base still lower, third base just a little higher than second, and the runners needed alpine stocks to come home from third. The pitcher's slab was elevated or depressed to suit the style of the pitcher, center and left fields were level, while right field, where the clever and speedy little Keeler played, was at such a sharp down grade that when Keeler played "deep" the batter scarcely could see him. The field was kept rough and the weeds and grass grew high. The visiting right fielder was all at sea as to which way a batted ball would roll, or how to reach it, while Keeler knew the angles perfectly and sprinted along rabbit tracks known only to himself. The "Orioles'" favorite method of attack, especially against slow teams, was bunting toward first base, the team being one of the pioneers in using the bunting attack as a method of demoralizing the defensive infield. The bunting was varied by "chopping"; that is, hitting the ball on top, to make it bound high. The hardness and springiness of the grounds made the chopped balls bound to enormous height, and the fast sprinters beat out scores of chopped balls while the helpless infielders were waiting for the ball to come down. Not satisfied with all these advantages, they banked up the base lines until they resembled billiard cushions, in order to keep bunted balls from rolling foul.

I quote at this length to give Mr. Fullerton's article a chance and to show with some fulness my reason for believing that baseball, — which I regard as almost or quite the best game in existence, — is on trial as a game for gentlemen. One of the "great baseball generals" named in the last passage I have quoted used to coach a Harvard team; something very like one of the plays illustrated by a diagram "showing how the pitcher,

pretending to back up the first baseman on a throw from the shortstop, interferes with the base-runner by passing in front of him, impeding his progress," was used in a Harvard team a year or two ago, till means were taken for stopping it. Mr. Fullerton asserts that "every year baseball advances in real sportsmanship," and he derives comfort from the fact that an excited, partisan crowd indignantly repudiated the throwing of a bottle and some other object at a visiting catcher when he was waiting for a foul ball to drop. Nevertheless he says, "Baseball indeed has the strangest code of ethics of any game played by men."

If it is baseball to bank up a portion of the field in a fashion scarcely noticeable to visitors, and to practise bunting into sloping places carefully prepared for one's private use, — if this, of which at least one important University has been accused, and of which, according to Mr. Fullerton, any professional team may be guilty, is baseball, baseball is no game for a decent man. Granted that no two persons will draw precisely the same line between honorable strategy and a low trick, there remains a fundamental difference between sport and sharp practice that even a child can understand. If students are wax in the hands of unprincipled coaches, if generosity to a rival is ignorance of the game, if, in short, the game is not the game but an intricate collection of such devices as would ostracize a man in anything else, college baseball should be stopped at once and for ever. If it is the duty of patriotic students to make all the noise they can while the visiting pitcher is facing their representatives, if it is the duty of the catcher to "steady" the pitcher by remarks that (incidentally) unsteady the batsman, if baseball must, as the *Yale Alumni Weekly* puts it, "degenerate into vocal competitions on the part of the players, or into efforts to rattle the opposing pitchers on the part of the grandstands," the sooner we have done with the game the better.

Yet the facts are these: Here is a fascinating game with every legitimate opportunity for a quick body and a quick mind. Not a single act to which an intelligent observer can object belongs to baseball. Baseball, properly played, baseball brilliantly played, may be not merely a great game, but a school of health, self-control, and honor. Unhappily it is like the man (in the small boy's version) who "went down to Jericho and fell among thieves, and the thieves sprang up and choked him."

Students are often charged with wasting opportunities for study; they may with equal justice be charged with wasting opportunities for sound athletic sport, for wide and generous

courtesy, for turning rivals into friends, or rather for recognizing rivals as friends. It is good to see signs of improvement; to know, for example, that on the night of a Yale football game at Cambridge some of our dormitories are full of Yale guests: but it is not good to see and hear what we still see and hear at athletic contests, or to know that at many a conference about dates of games the successful college representative is he who can get the upper hand of the others. Those of us who have faith in the radical soundness of American youth believe that, however slowly, a better day will come, — a day when in the arrangements for a game and in the game itself, every man thought fit to represent a college will give full measure of all accessory advantages to the college that is not his own.

L. B. R. BRIGGS.

THE GRADUATE SCHOOL OF ARTS AND SCIENCES

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — As Dean of the Graduate School of Arts and Sciences, I have the honor to submit a report on the School for the academic year 1910-11.

The following tables present in summary form information concerning the number and distribution of the students, recommendations for degrees, and the assignment of fellowships and scholarships.

Table I shows that the number of students registered in the School was four hundred and eighty-four, an increase of thirty-two over the preceding year. Of this number four hundred and fifty-eight were resident, and twenty-six non-resident, all of whom were travelling fellows. Of the resident students four hundred and sixteen were in attendance during the whole year, of whom three hundred and eleven were doing full work. Of the remaining forty-two resident students twenty entered the School after November 1 and twenty-two withdrew before the end of the year.

TABLE I. — NUMBER AND CLASSIFICATION OF STUDENTS

	1908-09	1909-10	1910-11
I. Resident Students doing full work in the School for the whole academic year			
Resident students not doing full work or not working for the whole year as Resident Students	290	279	311
	123	156	147
	—418	—435	—458
Non-Resident Students holding fellowships	15	15	26
Non-Resident Students not holding fellowships	1	2	0
	—16	—17	—26
II. Students whose studies lay chiefly in			
Semitic Languages and History	0	0	2
Ancient Languages (Classics and Indis Philology)	28	26	22
Modern Languages (including Comparative Literature)	127	117	164
History and Political Science	85	77	93
Philosophy	50	59	52
Education	12	23	16
Fine Arts (including Architecture)	6	2	5
Music	3	3	4
Mathematics	23	30	22
Physics	18	14	15
Chemistry	34	26	34
Engineering	1	2	0
Biology	18	29	30
Geology	9	9	12
Mining and Metallurgy	1	0	0
Anthropology	5	9	5
Medical Sciences	4	5	3
Unclassed Students	5	21	5
	—429	—452	—484
III. First-year Students			
Second-year Students	245	254	257
Third-year Students	104	110	136
Fourth-year Students	52	53	53
Fifth-year Students	18	24	24
Students in fifth year or later	10	11	14
	—429	—452	—484
IV. A.B.'s and S.B.'s of Harvard University and of no other institution			
A.B.'s and S.B.'s (and holders of similar degrees) of other institutions and also of Harvard University	120	122	150
Students not holding the Harvard degree of A.B. or S.B.	5	6	9
	304	324	325
	—429	—452	—484
V. Students holding the Harvard degree of A.M., S.M., Ph.D., or S.D.			
Students holding the Harvard degree of A.B. or S.B., but not of A.M., S.M., Ph.D., or S.D.	95	106	120
Students holding no Harvard degree in Arts, Philosophy, or Science	87	86	111
	247	260	253
	—429	—452	—484

In Table II similar facts concerning residence and amount of work are set forth for a period of twenty years. Tables III and IV show the percentage of students in their first and following years and the percentage of students without Harvard degrees.

TABLE II. — NUMBER OF STUDENTS: 1891-1911

	1891-92	1892-93	1893-94	1894-95	1895-96	1896-97	1897-98	1898-99	1899-1900	1900-01	1901-02	1902-03	1903-04	1904-05	1905-06	1906-07	1907-08	1908-09	1909-10	1910-11
Resident Students doing full work in the School for the whole academic year	108	127	162	161	175	194	171	218	227	226	218	216	299	273	260	281	287	290	279	311
Resident Students not doing full work or not working for the whole year as Resident Students	79	73	86	94	105	96	107	103	99	113	86	94	123	106	133	105	119	123	156	147
Whole number of Resident Students	187	200	248	255	280	290	278	321	326	339	304	310	412	378	393	386	406	413	435	458
Non-Resident Fellows	9	9	10	12	13	14	15	13	13	14	11	15	14	15	16	21	17	15	15	26
Other Non-Resident Students	4	7	1	5	6	2	..	3	2	..	..	..	1	2	..	..	1	1	2	..
Whole number of Non-Resident Students . . .	13	16	11	17	19	16	15	15	15	14	11	15	15	17	16	21	18	16	17	26
Whole number of students	200	216	259	272	299	306	293	336	341	353	315	325	427	395	409	407	424	429	453	484
Percentage of Resident Students doing full work for whole academic year	53	64	65	63	63	67	62	68	70	67	72	70	70	72	66	73	71	70	64	68

TABLE III. — PERCENTAGE OF STUDENTS IN THEIR FIRST AND FOLLOWING YEARS: 1898-1911

	1898-99.	1899-1900.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.
	%	%	%	%	%	%	%	%	%	%	%	%	%
First-year Students.	55	53	54	50	54	61	60	53	56	57	57	56	53
Second-year Students	21	25	23	26	26	21	24	26	21	23	24	25	28
Third-year Students	13	11	15	12	11	12	11	13	14	12	12	11	11
Fourth-year Students and Students of longer residence	11	11	8	12	9	6	5	8	9	8	7	8	8

TABLE IV. — PERCENTAGE OF STUDENTS WITHOUT HARVARD DEGREES: 1898-1911

	1898-99.	1899-1900.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.
	%	%	%	%	%	%	%	%	%	%	%	%	%
Percentage of Students holding no Harvard degree	41	44	44	40	46	46	52	52	55	58	58	58	52
Percentage of Students holding no Harvard first degree in Arts or Sciences	55	61	62	56	62	59	65	64	67	71	71	71	67

Tables V, VI, and VII indicate that the School continues to maintain its national character in the geographical distribution of its students and of the institutions from which they come to Harvard.

TABLE V.—COLLEGES AND UNIVERSITIES REPRESENTED BY FOUR OR MORE GRADUATES IN THE SCHOOL:
1906-07, 1907-08, 1908-09, 1909-10, 1910-11

1906-07.	1907-08.	1908-09.	1909-10.	1910-11.
Harvard 185	Harvard 182	Harvard 182	Harvard 199	Harvard 218
Dartmouth 10	Amherst 10	Columbia 11	Amherst 14	Dartmouth 11
Boston Univ. 8	Michigan 8	Amherst 9	Dartmouth 19	Bowdoin 8
Toronto 7	Brown 8	Brown 9	Chicago 8	Amherst 8
Amherst 7	Dartmouth 8	Dartmouth 8	Haverford 8	Haverford 8
Columbia 7	Williams 7	Bowdoin 7	Williams 8	Chicago 8
Yale 6	Princeton 6	Michigan 7	Princeton 7	Northwestern (Ill.) .. 7
Michigan 6	Bowdoin 6	Princeton 6	Bowdoin 7	Boston Univ. 7
Vanderbilt 6	Harvard 6	Haverford 6	Kansas 7	Brown 7
Bowdoin 5	Yale 6	Mass. Inst. of Tech. 6	Missouri 7	Yale 7
Calumet 5	California 6	Northwestern 6	Syracuse 7	Indiana 6
Cornell Univ. 5	Texas 6	Williams 6	Syracuse 7	Illinois 6
Harvard 5	Yale 6	Boston University 5	Indiana 6	North Carolina 6
Indiana 5	Columbia 5	Chicago 5	Missouri 6	Toronto 6
Kansas 5	Ohio Wesleyan 5	Mass. Inst. of Tech. 5	Illinois 6	Missouri 6
Missouri 5	Chicago 4	Michigan 5	Mass. Inst. of Tech. 6	Williams 6
Queen's 5	George Washington 4	Mass. Inst. of Tech. 6	Northwestern 6	Central (Ky.) 5
Rochester 5	Leland Stanford Jr. 4	Texas 5	Texas 6	Columbia 5
Adelphi 4	Mass. Inst. of Tech. 4	West Virginia 5	California 5	Cornell 5
Brown 4	Yale 4	Yale 5	Ohio State 5	Monmouth 5
Chicago 4	Adelphi 4	Adelphi 4	Ohio State 5	Western 5
Ohio Wesleyan 4	Princeton 4	California 4	Georgia 4	Mt. Allison 5
Princeton 4	Toronto 4	California 4	Charleston 4	Mass. Inst. of Tech. 5
State Univ. of Iowa .. 4	Vanderbilt 4	Kansas 4	Mount Allison 4	Tulsa 5
	Washington 4	Ohio Northern 4	Ohio Wesleyan 4	Kansas 5
		Ohio State 4	Western Reserve 4	Allegheny 4
		Southern California 4	Ohio Wesleyan 4	Dalhousie 4
		Tulsa 4	Western Reserve 4	Leland Stanford Jr. 4
		Westleyan (Conn.) 4		Ohio State 4
				Ohio Wesleyan 4
				Trinity (Conn.) 4
				California 4
				McGill 4
Total Membership, 407.	424	429	452	484

TABLE VI. — STUDENTS FROM HARVARD AND TWENTY-FIVE OTHER COLLEGES: 1895-96 — 1910-11

	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11	Total.
Harvard	178	174	178	196	191	197	189	174	232	192	197	185	182	182	199	218	3064
Amherst	7	7	5	5	7	10	8	10	14	8	8	7	10	9	14	8	137
Brown	6	5	7	8	5	11	8	11	12	7	12	4	8	9	6	7	126
Dartmouth	3	6	6	2	3	6	5	7	12	9	6	10	8	9	10	11	113
Bowdoin	7	4	3	6	4	9	8	7	7	5	3	5	6	8	7	9	98
Yale	4	2	4	10	4	7	4	6	9	7	8	7	6	5	7	7	97
Michigan	2	4	3	4	7	7	2	7	10	5	10	6	9	7	6	3	92
California	6	7	6	8	8	7	7	6	4	3	3	5	6	4	5	4	89
Ohio Wesleyan	2	1	4	2	2	3	5	5	8	14	12	4	5	3	4	4	78
Haverford	2	2	3	5	5	4	4	5	7	5	5	5	3	6	8	8	77
Kansas	8	8	8	5	4	5	2	3	3	2	3	5	3	4	7	5	75
Williams	2	2	—	2	4	6	3	4	7	7	7	3	7	6	8	6	74
Toronto	1	1	5	6	5	6	6	3	4	5	3	8	4	5	2	6	70
Boston Univ.	2	1	2	3	4	6	1	1	5	5	7	8	6	5	3	7	66
Wesleyan (Conn.)	8	8	5	8	5	5	3	3	4	2	3	3	3	4	2	2	63
Tufts	4	5	2	6	5	5	4	6	6	3	1	2	—	4	5	5	63
Indiana	2	6	4	5	4	2	3	3	2	3	4	5	5	3	6	6	63
Columbia	3	2	3	1	—	1	1	6	5	1	4	7	5	11	5	5	60
Northwestern	1	2	5	6	6	5	1	6	2	2	1	1	2	6	6	8	60
Leland Stanford Jr.	2	4	4	7	6	2	3	6	4	5	3	3	4	1	1	4	59
Chicago	—	1	3	2	2	3	3	7	1	3	4	4	4	5	8	8	58
Oberlin	2	7	5	3	6	9	4	1	—	1	3	3	3	4	4	—	55
Princeton	1	3	5	1	2	3	4	3	2	—	3	4	4	7	8	3	53
Texas	2	2	2	1	3	3	3	5	5	3	1	2	6	5	6	3	52
Dalhousie	3	2	2	3	4	4	5	2	2	2	4	2	3	3	3	4	48
Mass. Inst. of Tech.	4	3	4	3	3	2	1	1	1	1	2	2	4	6	6	5	48
Total Membership	290	306	293	336	341	353	315	325	427	393	409	407	424	429	452	484	

TABLE VII. — BIRTHPLACES OF GRADUATE STUDENTS: 1908-11

	1908-09	1909-10	1910-11
Students born in the New England States	129	132	143
Students born in other Northern States east of the Mississippi River	166	160	158
Students born in Southern States east of the Mississippi River	17	37	42
Students born in States west of the Mississippi River	58	61	65
Students born in the Dominion of Canada	27	27	32
Students born in other foreign countries	32	35	39
Total number of students	429	452	484
Percentage of students born in New England	30	29	30
Percentage of students born elsewhere	70	71	70

Tables VIII and IX set forth the number of candidates recommended for higher degrees and their distribution throughout the various Divisions and Departments.

TABLE VIII.—RECOMMENDATIONS FOR DEGREES IN 1909-11

	1909	1910	1911
I. Graduate students recommended for A.M.	109	130	150
Graduate students recommended for S.M.	3	4	—
Graduate students recommended for Ph.D.	38	34	40
	—150	—168	—190
II. Professional students recommended for A.M. on special courses of study	5	13	14
Professional students recommended for Ph.D. on special courses of study	— 5	3 16	1 15
Total number recommended for A.M., S.M., and Ph.D.	155	184	205
III. Harvard Bachelors of Arts or Science, not previously graduated elsewhere	38	50	51
Harvard Bachelors of Arts or Science, previously graduated elsewhere	2	1	4
Students not Harvard Bachelors of Arts or Science	115	133	150
	—155	—184	—205

TABLE IX.—DIVISIONS AND DEPARTMENTS IN WHICH RECOMMENDATIONS FOR THE HIGHER DEGREES WERE MADE IN 1911

Division	Department	Degrees	
		A.M.	Ph.D.
Ancient Languages		5	2
Modern Languages			
English		41	6
Germanic Languages and Literatures		10	—
French, and other Romance Languages and Literatures		9	1
Comparative Literature		—	1
In more than one Department		1	—
Total in Modern Languages		— 61	— 8
History, Government, and Economics			
History and Government		23	4
Economics		9	—
Total in History, Government, and Economics		— 32	— 4
Philosophy		12	6
Education		7	—
The Fine Arts		1	—
Music		—	1
Mathematics		9	1
Physics		4	2
Chemistry		8	8
Biology			
Botany		1	2
Zoölogy		3	3
Total in Biology		— 4	— 5
Geology		1	2
Anthropology		2	—
Medical Sciences		—	1
Undivisional		4	—
Professional Students:			
Divinity School		13	1
Medical School		1	—
Total		164	41

The degree of Doctor of Philosophy was conferred upon the forty-one men named below.

WILLIAM EWART MAURICE AITKEN, A.B. (*Univ. of Toronto*) 1908, A.M. (*ibid.*) 1909.

Subject, Philology. Special Field, Semitic Philology. Thesis, "Beelsebul, Baalsebub: A Contribution to the Study of Hebrew Proper Names and of Jewish Demonology." J. H. Thayer Fellow, American School for Oriental Study and Research at Jerusalem.

THOMAS BARBOUR, A.B. 1906, A.M. 1908.

Subject, Biology. Special Field, Zoology. Thesis, "A Contribution to the Zoogeography of the East Indian Islands." Member of the Faculty, Peabody Museum of American Archaeology and Ethnology, and Curator of Oceanica, Harvard University Library.

FREDERICK BARRY, A.B. 1897, A.M. 1909.

Subject, Chemistry. Special Field, Physical Chemistry. Thesis, I. "The Molecular Refractions of Hydrochloric Acid and of Stannic and Stannous Chlorides." II. "The Heats of Combustion of Homologous Hydrocarbons." Assistant in Chemistry and in the History of Science, Harvard University.

HAROLD EUGENE BIGELOW, A.B. (*Mount Allison Univ.*) 1903, A.B. (*Harvard Univ.*) 1907, A.M. (*ibid.*) 1908.

Subject, Chemistry. Special Field, Organic Chemistry. Thesis, I. "Some Derivatives of Bromtriodonitrobenzol and Related Compounds." II. "The Heat of Solution of Barium." Professor of Chemistry, Mount Allison University.

WALTER RAY BLOOR, A.M. (*Queen's Univ.*) 1902, A.M. (*Harvard University*) 1908.

Subject, Medical Sciences. Special Field, Biochemistry. Thesis, "The Carbohydrate Esters of the Higher Fatty Acids." Associate in Biological Chemistry, Medical School of Washington University.

SOLOM JUSTUS BUCK, A.B. (*Univ. of Wisconsin*) 1904, A.M. (*ibid.*) 1905.

Subject, History. Special Field, American History. Thesis, "The Granger Movement." Research Associate in History, University of Illinois.

PAUL WHITTIER CARLETON, A.B. 1906, A.M. 1907.

Subject, Chemistry. Special Field, Organic Chemistry. Thesis, "Some Derivatives of Certain Quinones and Aromatic Diketones." Instructor in Chemistry, University of Wisconsin.

EMORY LEON CHAFFEE, S.B. (*Mass. Institute of Technology*) 1907, A.M. (*Harvard Univ.*) 1908.

Subject, Physics. Special Field, Electricity. Thesis, "A New Method of Impact Excitation of Undamped Electric Oscillations and their Analysis by Means of Braun Tube Oscillographs." Instructor and Bayard Cutting Fellow for Research in Physics, Harvard University.

STANLEY PERKINS CHASE, A.B. (*Bowdoin Coll.*) 1905, A.M. (*Harvard Univ.*) 1906.

Subject, Philology. Special Field, English Philology. Thesis, "William Haslitt as a Critic." Instructor in English, Union College.

PHILIP GREELEY CLAPP, A.B. 1909 (1908), A.M. 1909.

Subject, Music. Special Field, Composition. Thesis, "Modern Tendencies in Musical Form." Teaching Fellow in Music, Harvard University.

FLETCHER BARKER COFFIN, A.B. 1895, A.M. 1896, LL.B. 1898.

Subject, Chemistry. Special Field, Inorganic Chemistry. Thesis, "A Revision of the Atomic Weights of Cobalt and Arsenic." Professor of Chemistry, Lake Forest College.

HARRY TODD COSTELLO, A.B. (*Earlham Coll.*) 1908, A.M. (*Harvard Univ.*) 1910.

Subject, Philosophy. Special Field, Logic. Thesis, "The Fundamental Characteristics of Organization, especially as Illustrated by those Organizations through which the Results of Science are Applied in the Arts and Industries." Frederick Sheldon Fellow, continuing his studies at Paris.

HARVEY WARREN COX, PH.B. (*Nebraska Wesleyan Univ.*) 1902, A.M. (*Univ. of Nebraska*) 1906, A.M. (*Harvard Univ.*) 1910.

Subject, Philosophy. *Special Field*, Epistemology and Psychology. *Thesis*, "[The Rise of the Motor Theory of Consciousness." Professor of Philosophy, University of Florida.

EDWARD CARROLL DAY, A.B. (*Hamilton Coll.*) 1907, A.M. (*Harvard Univ.*) 1908.

Subject, Biology. *Special Field*, Zoology. *Thesis*, "The Effect of Colored Lights on Pigment Migration in the Eye of the Crayfish." Parker Fellow, continuing his studies at Bonn, Germany.

WILLIAM GEORGE DODD, A.B. (*Bethany Coll., W. Va.*) 1893, A.M. (*Harvard Univ.*) 1908.

Subject, Philology. *Special Field*, English Philology. *Thesis*, "The Treatment of Love by Chaucer and Gower." Professor of English, Florida State College for Women.

ROBERT FISKE GRIGGS, S.B. (*Ohio State Univ.*) 1903, A.M. (*Univ. of Minnesota*) 1906.

Subject, Biology. *Special Field*, Botany. *Thesis*, "The Development and Cytology of *Rhodochytrium*." Assistant Professor of Botany, Ohio State University.

HARVEY CORNELIUS HAYES, A.B. 1907, A.M. 1908.

Subject, Physics. *Special Field*, Magnetism. *Thesis*, "An Investigation of the Errors in Cooling Curves and Methods for Avoiding these Errors; also a New Form of Crucible." Assistant and Fellow for Research in Physics, Harvard University.

VIRGIL LAURENS JONES, A.B. (*Univ. of North Carolina*) 1899, A.M. (*Carson and Newman Coll.*) 1901, A.M. (*Harvard Univ.*) 1910.

Subject, Philology. *Special Field*, English Philology. *Thesis*, "English Satire, 1650-1700." Associate Professor of English, University of Arkansas.

GEORGE LESLIE KELLEY, S.B. 1907.

Subject, Chemistry. *Special Field*, Organic Chemistry. *Thesis*, I. "The Constitution and Reactions of certain Halogenated Orthobenzoquinopyrocatechin Hemiesters." II. "The Transition Temperature of Sodium Chromate." Instructor in Chemistry, Harvard University.

RALPH HAYWARD KENISTON, A.B. 1904, A.M. 1910.

Subject, Philology. *Special Field*, Romance Philology. *Thesis*, "Garcilaso de la Vega: A Critical Edition of his Works, together with a Life of the Poet." Assistant Librarian, Hispanic Society of America, New York.

FREDERICK HENRY LAHEE, A.B. 1907, A.M. 1908.

Subject, Geology. *Special Field*, General Geology. *Thesis*, "A Study of Metamorphism in the Carboniferous Formation of the Narragansett Basin." Instructor in Geology, Harvard University.

DANIEL WOLFORD LARUE, A.B. (*Dickinson Coll.*) 1904, A.M. (*ibid.*) 1905, A.M. (*Harvard Univ.*) 1907.

Subject, Philosophy. *Special Field*, Epistemology. *Thesis*, "Type Studies in the Methods of Escape from Subjectivism." Teacher of Psychology and Pedagogy, State Normal School, E. Stroudsburg, Pa.

HENRY LAURENS, A.B. (*Coll. of Charleston*) 1907, A.M. (*ibid.*) 1908.

Subject, Biology. *Special Field*, Zoology. *Thesis*, "The Reactions of Amphibians to Monochromatic Lights of Equal Intensity." John Thornton Kirkland Fellow, continuing his studies at Bonn, Germany.

HENRY WHEATLAND LITCHFIELD, A.B. 1907.

Subject, Philology. *Special Field*, Classical Philology. *Thesis*, "Quibus Virtutum Vitorumque Moralium Exemplis ex suorum Annalibus sumptis Scriptores Latini Antiqui uti sint quaserit." Instructor in Greek and Latin, Harvard University.

JACOB LOEWENBERG, A.B. 1908, A.M. 1909.

Subject, Philosophy. *Special Field*, History of Philosophy. *Thesis*, "The Genesis of Hegel's Dialectical Method." Assistant in Philosophy, Harvard University.

CHARLES HOWARD MCLLWAIN, A.B. (*Princeton Univ.*) 1894, A.M. (*ibid.*) 1898, A.M. (*Harvard Univ.*) 1903.

Subject, History. *Special Field*, English History. *Thesis*, "The High Court of Parliament and its Supremacy." Assistant Professor of History, Harvard University.

HERBERT EUGENE MERWIN, S.B. 1908 (1907).

Subject, Geology. Special Field, Mineralogy and Petrography. Thesis, "Mineralogical and Petrographical Researches, with special Reference to the Stability Ranges of the Alkali Feldspars." Assistant Petrologist, Geophysical Laboratory, Carnegie Institution of Washington.

SAMUEL MOORE, A.B. (*Princeton Univ.*) 1899, A.M. (*ibid.*) 1908.

Subject, Philology. Special Field, English Philology. Thesis, "Chapters in the History of Literary Patronage from Chaucer to Carton." Lecturer in English Philology, Bryn Mawr College.

WILLIAM JAMES MUSGROVE, A.B. (*Univ. of California*) 1905, A.M. (*Harvard Univ.*) 1906.

Subject, Philosophy. Special Field, Philosophy of Mind. Thesis, "Animal Psychology and the Concept of a Mind." Instructor in Philosophy, University of Washington.

WILLIAM LEONARD PUGH, A.B. (*Parsons Coll.*) 1897, A.M. (*ibid.*) 1901, A.M. (*Northwestern Univ., Ill.*) 1908.

Subject, Philology. Special Field, English Philology. Thesis, "The Strong Verb in Chaucer." Assistant Professor of English, Wofford College, Spartanburg, S. C.

EMILE RAYMOND RIEGEL, S.B. 1908, S.M. 1910.

Subject, Chemistry. Special Field, Inorganic Chemistry. Thesis, I. "The Quantitative Determination of Antimony by the Gutzeit Method." II. "The Action of Sulphur Trioxide on Carbon Tetrachloride and Silicon Tetrachloride." Chemist, with the Cochrane Chemical Co., West Works, Everett, Mass.

DWIGHT NELSON ROBINSON, A.B. 1908, A.M. 1909.

Subject, Philology. Special Field, Classical Philology. Thesis, "Quibus Temporibus Religiones ab Oriente ortae et Romae et in Provinciis Romanis floruerint desiderintque quaserint." Instructor in Latin and Greek, Yale University.

WILLIAM OSCAR SCROGGS, S.B. (*Alabama Polytechnic Institute*) 1899, S.M. (*ibid.*) 1900, A.M. (*Harvard Univ.*) 1905.

Subject, History. Special Field, American History. Thesis, "The Financial History of Alabama, 1819-1860." Associate Professor of History and Economics, Louisiana State University.

CLARENCE LIVINGSTON SPEYERS, PH.B. (*Columbia Univ.*) 1884.

Subject, Chemistry. Special Field, Physical Chemistry. Thesis, "The Compressibilities and Surface Tensions of Water and Six Hydrocarbons." Professor of Thermodynamics, University of Pittsburgh.

ALBAN STEWART, A.B. (*Univ. of Kansas*) 1896, A.M. (*ibid.*) 1897.

Subject, Biology. Special Field, Botany. Thesis, "A Botanical Survey of the Galapagos Islands." Instructor in Botany, University of Wisconsin.

THORBERGUR THORVALDSON, A.B. (*Univ. of Manitoba*) 1906, A.M. (*Harvard Univ.*) 1909.

Subject, Chemistry. Special Field, Inorganic and Physical Chemistry. Thesis, I. "A Revision of the Atomic Weight of Iron." II. "Methods for the Adiabatic Determination of Heats of Solution of Metals in Acids." Edward William Hooper Fellow, continuing his studies at Dresden.

MASON WHITING TYLER, A.B. (*Amherst Coll.*) 1906, A.M. (*Harvard Univ.*) 1908.

Subject, History. Special Field, English History. Thesis, "Anglo-French Relations under James II." Instructor in History, Simmons College.

SAMUEL EVERETT URNER, PH.B. (*Baker Univ.*) 1906.

Subject, Mathematics. Special Field, Analysis. Thesis, "Certain Singularities of Point-Transformations in Space of Three Dimensions." Assistant Professor of Mathematics, Miami University.

FRANCIS COX WALKER, A.B. (*Univ. of New Brunswick*) 1892, A.B. (*Harvard Univ.*) 1894, A.M. (*ibid.*) 1902.

Subject, Philology. Special Field, English Philology. Thesis, "Syntax of the Infinitive in Shakspeare." Instructor in English, Washington University.

SHOGOBU WASHIO, PH.B. (*Drake Univ.*) 1909, A.M. (*Harvard Univ.*) 1910.

Subject, Philosophy. Special Field, Epistemology and Metaphysics. Thesis, "A Criticism of the Realism of G. E. Moore and B. Russell." Continuing his studies at Berlin.

CHARLES EDWARD WHITMORE, A.B. 1907.

Subject, Philology. Special Field, Comparative Literature. Thesis, "The Supernatural in Tragedy." Instructor in English, Harvard University.

Forty fellowships were assigned for the year 1910-11, including three John Harvard Fellowships without stipend. There were fourteen resident and twenty-six non-resident appointments. A list of the incumbents follows. After the name of each fellow is given the name of his fellowship, the subject that he studied, and his present occupation. The place of study of the non-resident fellows is also indicated.

TRAVELLING FELLOWS

ROBERT PIERPONT BLAKE, John Harvard Fellow. Ancient History. Berlin.
Reappointed. Continuing his studies at St. Petersburg.

OSCAR JAMES CAMPBELL, Frederick Sheldon Fellow. Comparative Literature. Paris.
Instructor in English, University of Wisconsin.

PHILIP GREELEY CLAPP, Frederick Sheldon Fellow. Music. Stuttgart.
Teaching Fellow in Music.

EDGAR DAVIDSON CONGDON, Frederick Sheldon Fellow. Zoölogy. Vienna.
Instructor in Anatomy, Cornell University Medical College.

MELVIN THOMAS COPELAND, Frederick Sheldon Fellow. Economics. London.
Instructor in Economics, New York University.

SUMNER WEBSTER CUSHING, Frederick Sheldon Fellow. Geology. India.
Instructor in Geography, State Normal School, Salem.

HENRY WADSWORTH LONGFELLOW DANA, Fellow of the Ministry of Public Instruction of the French Republic. Comparative Literature. Paris.
Frederick Sheldon Fellow, at Paris.

LLOYD DIXON, John Harvard Fellow. Mathematics. Oxford.
Continuing his studies at Oxford.

ARTHUR JOHNSON EAMES, Frederick Sheldon Fellow. Botany. Australasia.
Austin Teaching Fellow in Botany. Fourth-year Graduate Student.

ARTHUR LEON EATON, Rogers Fellow. Romance Languages. Madrid and Paris.
Instructor in French, Indiana University.

GEORGE HAROLD EDGELL, John Harvard Fellow. Fine Arts. Rome.
Reappointed. Fellow of the American School of Classical Studies at Rome.

GRIFFITH CONRAD EVANS, Frederick Sheldon Fellow. Mathematics. Rome.
Reappointed. Continuing his studies at Rome.

DONALD FISHER, Henry Bromfield Rogers Memorial Fellow. Philosophy. Graz.
James Walker Fellow, at Berlin.

EDWIN WILLIAM FRIEND, Rogers Fellow. Classics. Berlin.
Instructor in Latin, Princeton University.

- NORMAN SCOTT BRIEN GRAS**, John Thornton Kirkland Fellow. Economic History. London.
Frederick Sheldon Fellow, at London.
- PERCY HAZEN HOUSTON**, Parker Fellow. English. London.
Continuing his studies in Europe.
- DUNHAM JACKSON**, Edward William Hooper Fellow. Mathematics. Göttingen and Bonn.
Instructor in Mathematics.
- JOHN AVERY LOMAX**, Frederick Sheldon Fellow. American Ballads.
Reappointed. Assistant Professor of English, University of Texas.
- WILLIAM EDWARD LUNT**, Frederick Sheldon Fellow. History. London.
Thomas Brackett Reed Professor of History and Political Science, Bowdoin College.
- ROBERT GRANT MARTIN**, Frederick Sheldon Fellow. English. London.
Instructor in English, Northwestern University.
- RAYMOND EDWIN MERWIN**, Fellow in Central American Archaeology. Anthropology. Belize.
Continuing his studies in Central America.
- OLIN HARRIS MOORE**, Parker Fellow. Romance Languages. Paris.
Instructor in French, English High School, Boston.
- SERGIUS MORGULIS**, Parker Fellow. Zoölogy. Vienna.
Frederick Sheldon Fellow, at Berlin.
- HENRY MAURICE SHEFFER**, Frederick Sheldon Fellow. Philosophy. Cambridge, England.
Instructor in Philosophy, University of Washington.
- EDMUND WARE SINNOTT**, Frederick Sheldon Fellow. Botany. Australasia.
Austin Teaching Fellow in Botany. Fourth-year Graduate Student.
- LANGDON WARNER**, Frederick Sheldon Fellow. Oriental Art. Japan.
Assistant Curator of the Department of Chinese and Japanese Art, Boston Museum of Fine Arts.

RESIDENT FELLOWS

- CHARLTON ANDREWS**, MacDowell Fellow. Dramatic Composition.
Head of Department of English, State Normal School, Valley City, No. Dak.
- FREDERICK LANSDOWNE CANDEE**, South End House Fellow. Social Problems.
Director, South Bay Union, Boston.
- PAUL WHITTIER CARLETON**, Edward Austin Fellow. Chemistry.
Instructor in Chemistry, University of Wisconsin.
- HARRY TODD COSTELLO**, James Walker Fellow. Philosophy.
Frederick Sheldon Fellow, at Paris.
- ALFRED OTTO GROSS**, Edward Austin Fellow. Zoölogy.
Assistant in Zoölogy. Third-year Graduate Student.
- RALPH EMERSON HEILMAN**, Robert Treat Paine Fellow. Social Science.
Reappointed.
- THOMAS COOKE MCCracken**, South End House Fellow in Social Education. Social Education.
Reappointed.

SAMUEL MOORE, Christopher M. Weld Scholar. English.
Lecturer in English Philology, Bryn Mawr College.

JAMES HAMILTON PICKEN, Francis Parkman Fellow. Philosophy.
Christopher M. Weld Scholar, at Berlin.

ROBERT JACKSON RAY, Henry Lee Memorial Fellow. Economics.
Professor of Economics, Keiogijuku University, Japan.

CHARLES MANFRED THOMPSON, Osias Goodwin Memorial Fellow. History
and Government.
Assistant in History, University of Illinois.

THORBERGUR THORVALDSON, Edward Austin Fellow. Chemistry.
Edward William Hooper Fellow, at Dresden.

HENRY ASA VAN LANDINGHAM, Willard Scholar. English.
Associate Professor of English, Richmond College, Va.

CHARLES EDWARD WHITMORE, Edward Austin Fellow. Comparative Literature.
Instructor in English.

TABLE X. — FELLOWSHIPS AND SCHOLARSHIPS (1909-12)

1. *Applications and Appointments*

	1909-10	1910-11	1911-12
Spring applicants for reappointment or promotion	73	59	73
Spring applicants for a first appointment	273	300	285
Later applicants	37	39	40
	—382	—398	—398
Appointed to fellowships	24	24	47
Appointed to scholarships	86	91	88
Appointed instructors, teaching fellows, or assistants	23	32	33
	—133	—147	—168
Deduct for repetitions	5	1	3
	—128	—146	—165
Entered or continued in the Graduate School of Arts and Sciences without receiving any of the above-named appointments . .	47	68	72
Entered undergraduate classes of Harvard College	2	2	0
Entered other Departments of the University	6	8	5
	— 55	— 78	— 77
Applicants who were at the University in the year following their applications	183	224	242
Applicants not at the University in that year	199	174	156
	—382	—398	—398

2. *Classification of Applicants and Appointees*

	1909-10		1910-11		1911-12	
	Applicants	Appointees	Applicants	Appointees	Applicants	Appointees
Students of Philology	134	41	161	44	121	38
Students of History, Political Science, Philosophy, or Education	182	34	181	40	168	55
Students of Mathematics, Physics, or Chemistry	68	21	67	20	66	27
Students of Natural History	37	12	32	10	36	14
Students of other branches, or unclassified	11	2	7	1	7	1
	382	110	398	115	398	135
Students in Graduate School of Arts and Sciences	131	51	131	53	129	51
Students in Harvard College	23	5	23	4	18	5
Students in other Departments of the University	2	-	5	-	2	-
Former students in some Department of the University	34	8	33	8	37	9
Persons never previously members of the University	192	46	207	50	212	70
	382	110	398	115	398	135
Harvard Bachelors of Arts or Science, not previously graduated elsewhere	40	18	37	18	41	17
Harvard Bachelors of Arts or Science previously graduated elsewhere	2	-	6	3	3	1
Graduates of other institutions, not Harvard Bachelors of Arts or Science	269	73	296	70	303	93
Undergraduates of Harvard College or Lawrence Scientific School, not already graduated elsewhere	23	5	21	4	18	4
Undergraduates of other institutions and other non-graduates	48	14	36	20	33	20
	382	110	398	115	398	135

The members of the Administrative Board for 1910-11 were Professors W. M. Davis, Mark, G. F. Moore, B. O. Peirce, H. W. Smyth, Kittredge, Turner, Walz, Baxter, R. B. Perry, and the Dean. Ten meetings were held during the year. The opening meeting of the Graduate School of Arts and Sciences and of the Graduate Schools of Applied Science and Business Administration was held in the Faculty Room on the evening of Friday, October 7, 1910. The chief address was by Professor George Foot Moore, who discussed certain recent tendencies in college and university instruction. President Lowell and Mr. H. N. Hillebrand, President of the Graduate Club, spoke briefly.

Probably the most troublesome administrative question connected with the Graduate School of Arts and Sciences is that of admission to the School and to candidacy for a degree, a difficulty arising from the wide differences in the requirements for bachelor's degrees in American colleges. Some institutions confer the degree of A.B. for the studies of the secondary school; others publish standards of admission and graduation which they do not enforce; others do work which is good as far as it goes but does not constitute the full equivalent of a standard college course. Consequently some applicants cannot be permitted to register as graduate students, while others can with propriety be admitted to graduate standing but cannot be allowed to become candidates for a degree without a longer period of residence than is regularly required. Moreover, all graduates of the same college ought not to be treated alike; special consideration should be given to those who bring distinguished records, and there should always be an opportunity for revising the conditions of candidacy in the cases of students whose work at Harvard shows unusual excellence. A just decision in each individual case demands an amount of local knowledge and accumulated experience such as the authorities of no single graduate school can ever hope to possess. Fortunately the problem is one that concerns all American graduate schools, and an excellent beginning has been made in the direction of coöperative effort. In connection with the meeting of the Association of American Universities at Charlottesville in October, 1910, there was held a conference of deans and similar officers of the graduate schools of the institutions there represented, at which the question of admission was specially considered. Provision was made for the exchange of information between different universities, and the United States Bureau of Education was asked to assist in collecting and classifying facts bearing upon the standing of the bachelor's degrees of American colleges. This task was entrusted to the Bureau's Specialist in Higher Education, Dr. Kendrick C. Babcock (Ph.D. Harvard '96), who made a careful examination of the records of the various graduate schools and of such bodies as the Carnegie Foundation and the General Education Board, and has recently issued a preliminary "Classification of Universities and Colleges with reference to Bachelor's Degrees." This list, the first attempt to reduce to some sort of order the chaos of American college degrees, is necessarily tentative, but it has already rendered valuable service to the authorities of graduate

schools and in revised and enlarged form will serve as the principal supplement and corrective to the results which have been gained in our own experience. It should also be found useful in other departments of Harvard University, for under the system of organization which requires collegiate graduation for admission to the professional schools, the evaluation of college degrees becomes a necessity for these schools likewise. Diversities of practice in this respect have been a source of embarrassment to particular schools and to the University as a whole, and the establishment of a substantially uniform university standard is much to be desired.

One of the notable deficiencies in the students who enter the Graduate School is the inability on the part of a majority of them to make ready use of French and German books in their studies. Men come to us each year who have studied but one of these languages, and in making good this defect of preparation they are obliged to spend time which ought to be given to higher work. Harvard University requires an elementary knowledge of both French and German on the part of candidates for the degree of Master of Arts, yet so inadequate are the standards of the American baccalaureate as regards acquaintance with modern languages, that even this minimum is more than the general practice of American universities demands for the master's degree. Nevertheless, since a reading knowledge of one of these languages will after 1913 be demanded of all candidates for the A.B. and S.B. in Harvard College, it would seem necessary that Harvard should add a similar requirement for the degree of A.M., if the master's degree is to maintain its standing with reference to the A.B. In the case of candidates for the degree of Doctor of Philosophy a reading knowledge of German and French is regularly enforced, but often at the expense of valuable time on the part of those whose preparatory and collegiate education has been deficient in such training. This is one of the most obvious points at which graduate studies could be helped by increased efficiency in the American college.

It is the source of satisfaction to note the progress of the higher work of the school, as seen in the increasing number of students who remain more than one year (compare Table III) and in the growing resort to the more advanced and special courses. From certain points of view these courses of special training and research may be considered the most important which the University offers, for they are the nurseries of productive scholarship.

In them the contact between professor and student is most constant and most intimate, and through them the investigators of the future are trained and the productive capacity of the professor multiplied by the researches of his students. Such courses can never be large, else their purpose is defeated, and they are inevitably costly of the professor's time and the university's money; but the cost must be paid, and paid generously, if the university is to continue and develop as a centre of the highest scholarship. There are departments in which the provision of advanced courses is plainly inadequate, whether measured by the intrinsic importance of the subject or by the demands of actual and prospective students, and increased resources for maintaining and extending advanced instruction constitute the most pressing need of the Graduate School of Arts and Sciences. A gift of one million dollars could be immediately and advantageously used for such purposes; the eight professorships which it would support need not be confined exclusively to graduate instruction, but they should be devoted primarily to filling the most serious gaps in our advanced teaching. The endowment of particular professorships of this type would, of course, be a contribution to the same end.

A further means of stimulating productive scholarship would be furnished by the creation of a group of research fellowships for men of proved capacity for original investigation. The needs of those whose studies can only be continued elsewhere are now met by the Frederick Sheldon fund and other travelling fellowships, but for a great variety of investigations the libraries and laboratories of Cambridge offer opportunities of which our best students need to avail themselves for a longer period than is now generally possible. Each year men who have made a brilliant beginning in research are obliged to enter immediately upon instructorships which offer neither the leisure nor the facilities for advanced study and may ultimately cripple or destroy their impulse to productive work. The first few years after leaving the university are the critical period in the life of the potential investigator, and the opportunity of one or two years of comparative freedom would often turn the scale. Moreover, a group of picked and trained scholars of this sort, enjoying the income of a paid fellowship or the equivalent distinction of a John Harvard appointment, would by their presence and influence in Cambridge give stimulus and encouragement to the most ambitious men in the Graduate School. Such Fellows would

ordinarily, though not necessarily, have taken the doctor's degree; they might well give a small amount of time to teaching, but their primary occupation should be research. It is to be hoped that such foundations may be encouraged by the excellent example of the Bayard Cutting Fellowship for Research in Physics, established in 1911 with an income of \$575. The conditions of tenure prescribe that "this Fellowship, to be considered as a reward for men of the very highest intellectual attainments, is to be conferred upon a successful investigator, in order that he may remain in the University in the pursuit of his special research. This Fellowship shall carry with it the rank and privileges of an instructor, and may be conferred on the holders of other University appointments."

The productive work of the Graduate School of Arts and Sciences would also be greatly assisted by a publication fund which would ensure the publication of such important books and monographs, both of professors and of advanced students, as yield no commercial return and cannot find a place in the existing series of university publications. The best form which such a fund could take would be the liberal endowment of a University Press for the whole University.

CHARLES H. HASKINS, *Dean.*

THE GRADUATE SCHOOL OF APPLIED SCIENCE

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — I beg to submit the following report in regard to the Graduate School of Applied Science for the academic year 1910–11.

There was during the year one student enrolled in the Lawrence Scientific School whose graduation in June closed the process of reorganization of the Scientific School.

The enrolment by subject in the Graduate School of Applied Science at the time of the issue of the Annual Catalogue was as follows:—

	1909	1910
Civil Engineering	14	17
Mechanical Engineering	7	3
Electrical Engineering	17	15
Mining and Metallurgy	18	26
Architecture	5	20
Landscape Architecture	9	13
Forestry	12	19
Applied Chemistry	0	1
Applied Physics	1	0
Applied Biology	4	9
	<hr/> 87	<hr/> 123

Subsequent to the issue of the Catalogue there were ten additional enrolments distributed as follows:—

Civil Engineering	1
Architecture	2
Landscape Architecture	2
Applied Chemistry	1
Applied Biology	4
	<hr/> 10

The total enrolment in the School therefore, during the academic year 1910–11, was one hundred and thirty-three.

COLLEGES AND UNIVERSITIES REPRESENTED BY GRADUATES IN THE
GRADUATE SCHOOL OF APPLIED SCIENCE

Amherst College	1	New Hampshire College	1
Bowdoin College	1	Ohio State University	1
Brown University	1	Oxford University (England)	1
Carleton College	1	Park College	1
Colorado College	1	Princeton University	1
Colorado Agricultural College	1	St. Mary's College	1
Columbia University	1	South Dakota State College of Agriculture and Mechanic Arts 1	
Cornell University	1	South Eastern Agricultural Col- lege (Wye, England)	1
Dartmouth College	5	Swarthmore College	1
Hamilton College	1	Trinity College (Conn.)	1
Hamline University	1	Tufts College	1
Hampden-Sidney College	1	University of California	1
Harvard University	69	University of Idaho	1
Heriot-Watt College (Edin- burgh, Scotland)	1	University of Maine	1
Hobart College	1	University of Nebraska	1
Indiana University	1	Washington and Jefferson Col- lege	1
Iowa Agricultural College	1	West Virginia University	1
Japanese Naval College	1	Williams College	2
Lake Forest College	1	Yale University	3
Massachusetts Agricultural Col- lege	2		
Massachusetts Institute of Technology	3		

As shown by the above table, the total number of colleges and universities represented by graduates in the Graduate School of Applied Science was forty, as compared with thirty-one of the preceding year.

In the Division of Engineering the most notable event of the year was the appointment as Gordon McKay Professor of Sanitary Engineering of Mr. George C. Whipple, of the firm of Hazen and Whipple in New York. Mr. J. W. M. Bunker and Mr. Melville C. Whipple were appointed Instructors in Sanitary Engineering, as assistants to Professor Whipple for the organization and development of the department. During the latter part of the year extensive changes and installations were carried out in the organization of the laboratory courses in the subject. A strong argument for the early organization of this subject in the University was the opportunity for cooperating with the Department of Preventive Medicine and Hygiene under Professor Rosenau in the Medical School. Through the combined departments the University is undertaking one of the most modern of scientific developments in a unique manner.

The principal addition to the laboratory equipment of the Division of Engineering during the year was in the subject of electrical engineering on which the Division had agreed to concentrate its immediate efforts. With the exception of certain large equipments, such as that for high tension work, this department is rapidly becoming admirably equipped. Provision cannot be made for work in high tension phenomena without some large pieces of apparatus, of which the most expensive is a high voltage transformer, and without a small building especially adapted to the work.

The Engineering Camp has for several years been one of the best managed institutions for undergraduate instruction. All who have been connected with the Camp, whether as students or as junior instructors, and all who have visited the Camp agree that the character of the work done by the students has been of a high order and the discipline excellent. Great credit is due Professor Hughes for these admirable results. In the past the Camp has been on an independent budget and self supporting. The Camp is of so much importance to the higher work in engineering that it may well be made dependent on the same resources as the other work in the Division of Engineering and share in the support from the McKay bequest. In view of the diminished count allowed the summer courses in engineering toward the Bachelor's degree there will be without question a diminution in the number of students in the next and ensuing years. In view of this certain prospect in the diminution of attendance and therefore in the receipts of the summer courses, and in view of their importance not merely in their present form but in an even more enriched form, it is desirable that these courses and the maintenance of the Camp should be placed on the budget of the Scientific School.

In addition to the installation of the laboratories in sanitary engineering and the rearrangement of rooms which this rendered necessary, other changes have been made in Pierce Building. Space has been made for an office and lecture rooms for the Division of Forestry during its winter term. In the library a space has been reserved for the books of the Division of Forestry. This has been accomplished at a considerable sacrifice on the part of the Division of Engineering. Other changes made in the arrangement of the library, providing for a separation of the stacks from the reading room, have rendered possible greater care and oversight of the books and their use.

The Division of Mining and Metallurgy, with an unusually strong staff, still remains in need of better physical equipment. It is cramped in its quarters. In many fields it is cramped in its laboratory resources. Its library is ill housed and is lacking in books and periodicals. The lack in periodicals is especially deplorable in view of the fact that the instruction in the Division is in so large a measure conducted by reference to current literature, a form of instruction on the whole characteristic of the School and consistent with the best traditions of the University. There is also great need for the equipment of a course in electrical and magnetic ore separators, and in the application of electrical and magnetic methods to mining and metallurgical processes in general.

The year under review was one of great change and reorganization in the Department of Architecture. It is especially noteworthy for the acceptance of a Professorship in Architectural Design by Professor Eugène J. A. Duquesne, and the acceptance of an Assistant Professorship in Architectural Design by Mr. John S. Humphreys. Professor Duquesne began his work in April, Professor Humphreys at the close of the academic year. Professor Duquesne came from the École des Beaux Arts, and it was his atelier above all others to which American students, going to Paris for further study in architecture, resorted. Professor Humphreys came from the firm of Carrère and Hastings in New York. Great credit for this reorganization and the present perfect condition of the Department, both in its large lines and in its details, is due Professor Warren.

There were no changes in the staff of the Department of Landscape Architecture, but the Department continued the improvement of its equipment, now one of the best in the country. The recognition of the Department by the practising profession is perhaps best indicated by the fact that it has been chosen as a place for deposit of all of the plans submitted for membership in the American Society of Landscape Architects. The Department continued its bibliography of landscape architecture and city planning, a production of value to the profession.

Through the active assistance of the Visiting Committee of the Board of Overseers the Division of Forestry was enabled to make a strong addition to its teaching staff and to undertake important extensions in its programme of studies. During the year Mr. Austin Cary returned to the service of the Department

as Lecturer in Lumbering and Forest Engineering, and Mr. E. E. Carter, Assistant Forester in the United States Forest Service, accepted an appointment as Assistant Professor of Forestry to fill the vacancy left by the resignation of Mr. MacKaye. The physical equipment was still further perfected and great improvement rendered in the buildings, grounds, and farm outfit.

The Division of Forestry again suffered during the winter from its inadequate accommodations in Cambridge, its library and its lecture room being in a cramped and ill lighted and ill heated building. During the year, however, arrangements were made with the Division of Engineering, looking toward the housing of the Division of Forestry for the ensuing year in Pierce Hall.

The Bussey Institution, representing the work of the School in Applied Biology, grew in its physical equipment and in the number of students and the interest which its work produced. The prime work of the Bussey Institution being advanced instruction and research, its activity could be adequately represented only by a list of its important contributions.

The best land of the Bussey Institution was transferred many years ago to the Arnold Arboretum. Of that which remains comparatively little is of such location and quality as to be of service. The low land which lies between South Street and the railway track, across the street from the main buildings of the Bussey Institution, is fertile and because of its protected location of great value to the Bussey Institution and above all things should be retained against all inroads. It is about the only land now left which is of value. That which lies between the railway tracks is so exposed to depredations, so stripped of its surface soil in enriching the land of the Arnold Arboretum, or else so low in level as to be of comparatively small value either to the Bussey Institution with its old form or with its new purpose. As it lies within the city limits and at the end of the elevated railway as well as near an important station of the New York, New Haven, and Hartford Railway, there are many reasons why it should be added to the developed and taxed property of the city. Could permission be obtained from the General Court for the disposal of this angle of land, the resulting increase in endowment would enable the Bussey Institution to develop as an even more vigorous and more complete institution of biological research.

During the year the School of Applied Science was placed on independent financial resources and thus under the necessity

of operating under the limitations of a well defined budget. In this process the Corporation voted that the resources of the School from other than the McKay Endowment should be annually less by an amount equal to one quarter of the increase from the McKay bequest until the income of the School from other resources than the McKay bequest should be equal to that at the time of the death of Mr. Gordon McKay.

WALLACE C. SABINE, *Dean.*

THE GRADUATE SCHOOL OF BUSINESS ADMINISTRATION

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—I have the honor of presenting my report upon the Graduate School of Business Administration for the academic year 1910-11.

The number of students registered is shown in the following comparative table, counting as "regular" students college graduates taking full work in the School:—

		Number of Students		
		1908-09	1909-10	1910-11
Regular students:				
First-year		33	42	43
Second-year		—	8	10
		33	50	53
Special students:				
(a) College graduates taking partial work		25	15	15
(b) Not holding college degrees		22	26	26
		47	41	41
Totals		80	91	94

GRADUATES OF COLLEGES

Amherst College	1	Peking University	1
Brown University	1	Princeton University	1
Clark College	1	Trinity College (Conn.)	1
College of the City of New York	1	Tufts College	3
Cornell University	1	Université de Rennes (France) ..	1
Dartmouth College	3	University of Arkansas	1
Guilford College (N.C.)	1	University of North Carolina	1
Harvard University	43	University of Southern California ..	1
Mass. Institute of Technology	1	University of Wisconsin	1
Monmouth College	1	Yale University	1
Otterbein University	1		—
Ouachita College (Ark.)	1		68

(22 colleges represented, as compared with 14 in 1908-09 and 19 in 1909-10.)

Geographical distribution of students:—

STATES:		STATES:	
Alabama	1	New York	9
Arkansas	2	North Carolina	2
Connecticut	1	Ohio	4
Georgia	1	Pennsylvania	2
Illinois	3	Rhode Island	1
Indiana	1	Vermont	1
Maine	1	Virginia	1
Maryland	1	Wisconsin	1
Massachusetts	54		
Michigan	1	FOREIGN COUNTRIES:	
Minnesota	2	China	3
New Jersey	1	France	1

(20 states and 2 foreign countries, as compared with 12 states and 2 foreign countries in 1908-09 and 16 states and 5 foreign countries in 1909-10.)

Average ages of students (taking age in years and months on dates of registration in each academic year):—

	1908-09	1909-10	1910-11
First-year men	23.22 years	22.95 years	23.26 years
Second-year "	—	24.75 "	24.67 "
Special students	31.65 "	32.06 "	31.68 "
with degree	30.11 "	27.89 "	27.63 "
without "	32.66 "	34.47 "	34.01 "

The degree of Master in Business Administration was conferred in June, 1911, upon eight men, John Frederic Spence receiving this degree "*with distinction*." The names of the graduates and the subjects of the graduation theses are as follows:—

Edgar Stratton Chappellear, A.B. (*Dartmouth Coll.*) 1909.

Thesis subject: "Capitalization of Industrial Corporations."

Ting-chi Chu, A.B. 1909.

Thesis subject: "Currency Reform in China."

Carroll Dunham, 3d, A.B. 1910.

Thesis subject: "Bank Stocks as an Investment."

Bryant Burwell Glenny, Jr., A.B. (*Yale Univ.*) 1909.

Thesis subject: "Paying Workmen in Industrial Plants."

Herman Goepper, A.B. 1909.

Thesis subject: "The Statistical Use of some Accounting Records in Telephone Operation."

Laurence Edward Poland, A.B. 1909.

Thesis subject: "The Application of Scientific Management in a Small Factory."

John Frederic Spence, A.B. 1910.

Thesis subject: "The Relation of the Packers to the Leather Trade."

Clarence Birch Stoner, A.B. (*Otterbein Univ.*) 1896.

Thesis subject: "Y. M. C. A. Accounts."

The two prizes of one hundred dollars and fifty dollars, offered annually by Mr. George Oliver May of New York, for the two best graduating theses, were awarded to Mr. Herman Goepper and Mr. C. B. Stoner.

Because of lack of satisfactory candidates, only three of the five University Scholarships for the year 1910-11 were awarded, as follows:—

John David Plant, A.B. (*Cornell Univ.*) 1910.

Frank Starr Spring, A.B. 1910.

Clarence Birch Stoner, A.B. (*Otterbein Univ.*) 1896.

The following changes in courses were made from 1909-10: Business 7 (Law of Banking Operations) was shortened to a half course; Business 11¹ (Commercial Organization and Methods) was lengthened to a whole course; Business 12² (Economic Resources and Commercial Policy of the Chief European States) was omitted. The Department of Public Business was transferred to the new Department of Government. A course entitled An Introduction to the Technique of Printing was given for the first time, with Mr. C. C. Lane, Publication Agent, in charge. The Business School supported during this year Fine Arts 5¹hf. (The History of the Printed Book), given by Mr. W. C. Lane, Librarian, under the Department of Fine Arts.

The new course in printing was given by outside lecturers, chosen in coöperation with the Advisory Committee on Printing, and the conduct of this course, even during its first year, has been unusually satisfactory. We can no longer regard as experimental the coöperative lecture courses in which business men assist as specialists. When properly organized, they have proved successful. Moreover, the opportunity of meeting and questioning men of large experience in affairs is valuable to and highly appreciated by the students of the School. This feature of the School's instruction should be continued, although for various reasons changes will undoubtedly be made from time to time in the amount of such outside assistance in any particular course. This method of instruction may be extended with advantage to some courses in which it has not hitherto been applied, whereas in other courses the number of lecturers will be diminished owing to changes in circumstances. During the past year, for instance, Professor Sprague has taken upon himself an increasing part of the instruction in the course on Corporation Finance.

The outside lecturers in these courses were as follows during 1910-11:—

**BUSINESS 14²: ECONOMIC RESOURCES AND COMMERCIAL ORGANIZATION
OF CENTRAL AND SOUTH AMERICA**

- Herbert Barber of New York: "Shipping Business between the United States and the River Plate."
 Dudley Bartlett of Philadelphia: "Cuba."
 John Birkinbine of Philadelphia: "Industrial and Trade Conditions of Mexico."
 Charles Lyon Chandler, American Consular Assistant at Buenos Aires: "The Trade of the Argentine"; "Industrial Development of the Argentine," and "Foreign Investments in the Development of the Argentine."
 Dr. W. C. Farabee: "The Rubber Industry."
 Colonel Horace N. Fisher of Brookline: "Resources and Trade of Chili."
 Henry G. Granger of New York: "Colombia."
 H. R. A. Grieser of New York: "The West Indies and United States Interests, with especial attention to Haiti and Santo Domingo."
 Dr. Albert Hale of Washington, D. C.: "Trade Possibilities and Methods in Central America, Colombia, and Venezuela."
 A. S. Hardy of New York: "Nicaragua."
 Hon. George A. Loud of Washington, D. C.: "Panama Canal."
 W. G. Reed: "Geographical Factors in South American Commerce."
 J. Richling, Consul General from Uruguay: "Uruguay."
 Professor L. S. Rowe of the University of Pennsylvania: "Attitude of the Latin-American Nations toward the United States."
 Wilfred H. Schoff of Philadelphia: "Peru"; "Bolivia," and "Ecuador."
 Professor J. Russell Smith of the University of Pennsylvania: "Relation of the Panama Canal to American Shipping" and "The Panama Canal with Relation to the West Coast of South America."
 W. H. Stevens of New York: "Banking, Currency, and Foreign Exchange."

BUSINESS 17¹: INDUSTRIAL ORGANIZATION

- M. W. Alexander of Lynn: "Training of Men," and "Training of Men for Industrial Efficiency."
 Carl G. Barth of Philadelphia: "Routing."
 M. L. Cooke of Philadelphia: "Training and Development of Workers."
 Charles Day of Philadelphia: "Routing."
 Harrington Emerson of New York: "Securing Efficiency in a Railroad Organization."
 J. O. Fagan of Boston: "The Limitations on Management by Trade Organizations and by other Factors" and "The Limitations on Workmen's Efficiency by Trade Organizations."
 W. C. Fish of Lynn: "Decentralized Management."
 H. L. Gantt of New York: "The Compensation of Workmen; paying for Time versus paying for Results," and "Training of Workmen in Habits of Industry and Coöperation."
 C. B. Going of New York: "The Relation of Industrial Engineering to Industrial Organization."

- H. F. J. Porter of New York: "Industrial Betterment; developing the Efficiency of the Human Element in a Working Organisation."
 Russell Robb of Boston: "Organisation."
 W. F. Russell of Harrisburg, Pa.: "Cost Accounting in Manufacturing Establishments."
 Gershom Smith of Washington, D. C.: "Mechanical Aids in Accounting and Statistical Departments" and "The Distribution of Indirect Costs by the Machine-hour Method."
 J. E. Sterrett of Philadelphia: "The Relation of the Accountant to Economical and Efficient Management."
 F. W. Taylor of Philadelphia: "Task Management and its Nature"; "Task System and Workingmen," and "Planning Department; general Principles."

BUSINESS 18: INDUSTRIAL ORGANIZATION (advanced course)

- Frederick M. Feiker of Chicago: conduct of field work in course for six weeks, ending March 22, 1911.
 Sanford E. Thompson of Newton Highlands: special instruction in time study in course for eight weeks, ending May 26, 1911.

BUSINESS 20c: AN INTRODUCTION TO THE TECHNIQUE OF PRINTING

- H. L. Baker of New York: "Printing Machinery."
 A. E. Barter of Norwood, Mass.: "Binding."
 Henry L. Bullen of Jersey City: "Commercial Printing."
 J. C. Dana of Newark, N. J.: "Introductory Lecture."
 A. W. Elson of Boston: "Reproducing Processes."
 E. B. Hackett of New Haven, Conn.: "Copy."
 H. L. Johnson of Boston: "The Principal Printing Offices of the World."
 C. C. Lane of Cambridge: "Distribution."
 A. D. Little of Boston: "Physical Qualities of Paper."
 J. H. McFarland of Harrisburg, Pa.: "Printing Office Management."
 A. F. MacKay of Philadelphia: "Machine Composition."
 C. E. Mason of Boston: "Paper Making."
 H. M. Plimpton of Norwood, Mass.: "Binding."
 W. S. Timmis of New York: "Printing Office Equipment and Routing."
 J. A. Ullman of New York: "Printing Ink."
 D. B. Uplike of Boston: "Type and Composition."

BUSINESS 25: CORPORATION FINANCE

- Grosvenor Calkins of Boston: "Incorporation Organization and Power of Corporations."
 Hon. William H. Corbin of Hartford, Conn.: "Taxation."
 W. J. Curtis of New York: "Local Public Service Corporations."
 A. Lowes Dickinson of New York: "Determination of Profits."
 J. F. Hill of Boston: "Issue of Securities."
 Judge C. M. Hough of New York: "Bankruptcy."
 T. W. Lamont of New York: "Underwriting."
 G. O. May of New York: "Disposition of Surplus."
 H. L. Stimson of New York: "Federal Control of Corporations."
 F. W. Whitridge of New York: "State Control of Corporations."

The lectures on subjects of general business interest, given under the auspices of the School and open to the students of the University, were as follows:—

Henry White Cannon, Chairman of the Board of Directors, Chase National Bank, New York: "The National Banking System."

Henry E. Hess of New York: "The Proper Assessment of Fire Insurance Rates in Great Cities."

Hon. Seth Low of New York: "New Business Problems."

F. I. Kent, Vice-President of the Bankers' Trust Company, New York: "Foreign Exchange."

Julius Kruttschnitt, Director of Maintenance and Operation, Union Pacific System, Chicago, Ill.: "The Operating Efficiency of our Railroads."

Hon. Franklin MacVeagh of Washington, D. C.: "The Life of the Business Man."

There were special lecturers in the following courses:—

ECONOMICS 18

Professor H. R. Hatfield of the University of California: "History of Accounting," on May 10, 1911.

BUSINESS 1

Professor H. R. Hatfield of the University of California: "Comparison of English, French, and German Methods of Accounting with our Own," on May 12, 1911.

BUSINESS 10

Professor J. Russell Smith of the University of Pennsylvania: "Organization of Ocean Shipping," on March 17 and 20, 1911.

BUSINESS 11

J. R. Simpson of Boston: "Retail Merchandising," on March 8 and 10, 1911.

H. N. McKinney of Philadelphia: "Advertising," on March 20, 1911.

BUSINESS 24

Samuel H. Ordway of New York: "Defects and Proposed Reforms of the New York Stock Exchange," on April 6, 1911.

A considerable addition was made during the year to the list of firms which have agreed to allow their plants to be inspected and studied by students of the School. The following firms should be added to the list given in last year's report:—

American Rubber Co., East Cambridge.

American Steel and Wire Co., Worcester.

American Watch Tool Co., Waltham.

Atwood and McManus, Chelsea.

Beggs and Cobb, Winchester.

Boott Mills, Lowell.

Boston Bookbinding Co., Cambridge.
 Boston Bridge Works, East Cambridge.
 Boston Rubber Shoe Co., Malden.
 William S. Butler Co., Boston.
 M. W. Carr and Co., West Somerville.
 Edwin Clapp and Sons, East Weymouth.
 Commonwealth Shoe and Leather Co., Whitman.
 Commonwealth Trust Co., Boston.
 Converse Rubber Shoe Co., Malden.
 John H. Cross Co., Cambridge.
 Lewis A. Crossett, North Abington.
 A. H. Davenport Co., East Cambridge.
 P. Derby and Co., Gardner.
 Doten-Dunton Desk Co., Cambridge.
 W. L. Douglas Shoe Co., Brockton.
 George H. Ellis Printing Co., Boston.
 Faunce and Spinney, Lynn.
 Farley Harvey Co., Boston.
 Gilchrist Co., Boston.
 Griffin Wheel Co., Chelsea.
 P. J. Harney Shoe Co., Lynn.
 Hornblower and Weeks, Boston.
 Houghton Mifflin Co., Boston.
 Ivers and Pond Piano Co., Boston.
 Kidder, Peabody Co., Boston.
 Kitson Machine Shop, Lowell.
 Lawrence and Co., Boston.
 A. C. Lawrence, Boston.
 Maverick Mills, East Boston.
 W. H. McElwain Co., Boston.
 Mead-Morrison Manufacturing Co., Cambridge.
 National Shawmut Bank, Boston.
 New England Confectionery Co., Boston.
 New England Maple Syrup Co., Cambridge.
 Old Boston National Bank, Boston.
 Poland Laundry Machinery Co., Roxbury.
 Rickard Gregory Shoe Co., Lynn.
 Reed and Prince, Worcester.
 Saco-Pettee Co., Newton Upper Falls.
 A. Shuman and Co., Boston.
 Simplex Electrical Co., Cambridge.
 B. F. Sturtevant Co., Hyde Park.
 Talbot Mills, North Billerica.
 Tileston and Hollingsworth Co., Hyde Park.
 Watertown Arsenal, Watertown.
 Walker-Stetson Co., Boston.
 Wellington-Sears Co., Boston.
 R. H. White Co., Boston.
 Whittenton Manufacturing Co., Taunton.
 Women's Educational and Industrial Union, Boston.

The coöperation of business firms in taking students for summer employment is again to be noted. For special reasons only six of the ten students returning for the second year's work were employed during the summer, a smaller proportion than in previous years. The reports from employers continue to be remarkably favorable.

The Reading Room in Lawrence Hall, referred to in last year's report, has been in use during the year and has become an indispensable part of the School's equipment. In this Reading Room are placed reference books for use in connection with each of the courses in the School, together with a large number of corporation reports and other similar material. There are now approximately twelve hundred and fifty volumes and nine hundred and sixty pamphlets in this Reading Room. A few additions were made during the year to the list of confidential business documents for the Business Archives, a collection to which attention should be drawn and which will doubtless increase with the growth of the School and the interest and confidence shown in it by business firms.

In close proximity to the Reading Room in Lawrence Hall there has been assigned, with President Lowell's consent, a room for the use of the Business School Club, a student organization which commenced its activity in the second year of the School's existence. The Club has furnished this room as a place for Club meetings and purposes of study.

Mr. A. F. Crowley, Superintendent of the Reading Room, made during the year a visit to libraries in Philadelphia, New York, and Washington, which specialize in collecting books and other material in relation to business, in order to study their methods and resources.

A study tour was made by Mr. P. T. Cherington, Instructor in Economic Resources, during the summer of 1910, to Panama, Costa Rica, and Guatemala. During the latter part of this same summer Mr. Cherington made a short trip to Pittsburgh, Cleveland, Cincinnati, Louisville, Washington, Philadelphia, and New York, to get material on the trade in certain products of those cities.

During this last academic year Mr. Selden O. Martin, appointed Instructor in the School, on leave of absence, has been making an extended tour in South America, in preparation for his course on Economic Resources and Commercial Organization of Central

and South America, to be given in 1911-12, during the second half-year.

Such study tours by instructors and others connected with the School are a part of the general policy of furtherance of research which is at once the opportunity and the duty of a graduate school such as ours. The study tours are undertaken primarily to provide further equipment for the direct work of instruction, since in many of the subjects which must be offered in the School the necessary knowledge can be obtained only as a result of careful and prolonged personal inquiry. While benefiting the School, such studies have, however, the advantage of being of service to the community or to the industries investigated. Such, for example, has been the work done under Professor Cole's direction by the advanced students in Business 2, where practice in auditing was given at the Women's Educational and Industrial Union, an educational and charitable organization in Boston that conducts many enterprises and has many kinds of receipts and expenditures. The members of the class worked also with the instructor in devising a system of accounting for a group of local hospitals.

In this connection mention should also be made of an enterprise inaugurated during the year which promises to give notable results. Through the initiative and generosity of Mr. A. W. Shaw of Chicago, Editor of *System*, a fund was established to be known as the Shaw Fund for Business Research. It was determined after a series of conferences to commence with a study of retail conditions in the boot and shoe industry, and preparations were made to send two investigators into the field for the summer of 1911.

There has been promised the School annually by Mr. Joseph E. Sterrett, of the firm of Price, Waterhouse and Company, one hundred dollars which the Administrative Board has voted to be used to buy additional books on accounting, such purchases to have a bookplate indicating the fund from which they were made.

Of significance for the future of the School was the investigation and report of the sub-committee, appointed by our Visiting Committee. This sub-committee inspected the methods and the programme of instruction of the School. Some of its members visited classes, and expressions of opinion in regard to the work of the School were obtained from a large majority of former students and from some of their present employers. On the

basis of this evidence the Visiting Committee reported favorably upon the scope of instruction and the quality of the work done in the School, and the report to the Board of Overseers states that the Committee is convinced of the wisdom and expediency not only of continuing the work of the School but of continuing it upon a broader and more permanent financial basis. Some increased expenditure would be necessary to carry such plans into effect, but even to continue the present work of the School on the most economical plan will require an income of at least \$30,000 a year, in addition to the estimated receipts from students. It should be noted, however, that with this minimum income, no provision would be made for a building or for additional new courses or for the appointment of additional instructors. It is hoped that steps will be taken soon to provide, preferably by endowment, for the needs of the School.

EDWIN F. GAY, *Dean.*

THE DIVINITY SCHOOL

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — As Dean of the Divinity School I have the honor to present the following report for the year 1910–11.

With the exception of Professors Peabody and Emerton who were absent during the first and second half-year respectively, all the members of the Faculty were in residence and gave their courses as announced. On account of illness, Professor Coe was unable to give the course on Religious Education (Homiletics 10²*h*f) provided by the generosity of Mr. Sears, but Asst. Professor H. W. Holmes, who was to have been his assistant, gallantly undertook at very short notice to conduct the course and carried it through successfully and profitably. Thanks to the continued kindness of Mr. Sears the arrangement made with Professor Coe last year has been renewed and his course is included in the offering for the present year.

Experience seems to demonstrate that students will not ordinarily attend lectures or courses of lectures, however good, which do not count towards a degree. Therefore it has seemed inexpedient to provide such lectures. Last year, however, the Reverend Rodney F. Johonnot, LL.B., S.T.D., gave two lectures on "The Legal Relations of a Minister to his Parish," which were well attended and highly appreciated.

By vote of the Faculty no session of the Summer School of Theology was held in 1911. This does not necessarily mean that the School has been permanently abandoned, but in the circumstances it seemed best to omit it for at least one year. Through the King's Chapel Lectures under the auspices of the Lowell Institute, the Sunday afternoon preaching services in King's Chapel by members of the Faculty, and especially through the *Harvard Theological Review*, the Divinity School is now rendering far wider public service than was the case ten years ago, and the need of the Summer School has become correspondingly less. Moreover, the annual deficit, constituting a drain upon the resources of the regular School, makes it doubtful whether we ought to curtail the opportunities of students preparing for the ministry

in order to continue the Summer School attended for the most part by ministers in active service. No final decision, however, has been reached with regard to the continuance of the Summer School.

During the past year 55 students were enrolled in the regular School, of whom 3 left at the end of the first half-year and 3 entered at the beginning of the second half-year. The distribution was as follows:—

Resident Graduates	13
Senior Class	6
Middle Class	5
Junior Class	4
Special Students	11
Andover Students	16
	—
Total	55

Thirty-six colleges were represented as follows:—

Alabama Polytechnic Institute	1	Marietta College	1
Amherst College	5	University of Michigan	1
Berea College	1	Missouri Wesleyan College	1
Boston University	1	Nebraska Wesleyan University	1
Bowdoin College	1	University of North Carolina	1
Brown University	3	Northwestern University	2
Carson and Newman College	1	Ohio Northern University	1
Central College	1	Olivet College	1
University of Chicago	1	Syracuse University	3
Colgate University	1	Tarkio College	1
Columbia University	1	University of Toronto	3
University of Denver	1	Tufts College	1
Drake University	3	Vanderbilt University	1
Drury College	1	Wesleyan University	1
Earlham College	1	Western Reserve University	1
Harvard University	10	Yale University	1
Kansas Normal College	1		—
University of Kansas	1		58
Kentucky School of Medicine	1	Counted more than once	7
Leland Stanford Jr. University	1		—
			51

Fourteen theological seminaries were represented by graduates as follows: —

Bangor Theological Seminary	1
Boston University	5
Chicago Theological Seminary	2
Doshisha Theological Seminary, Japan	1
Drake University	2
Drew Theological Seminary	1
Garrett Biblical Institute	1
Harvard University	2
Meadville Theological School	1
Pacific Theological Seminary	1
Tohoku Gakuin, Japan	1
Union Theological Seminary	1
Theological School of Van, Turkey	1
Victoria University	1
	<hr/>
	21
Counted more than once	2
	<hr/>
	19

The interchange of instruction between the Faculty of the School and the Faculty of Arts and Sciences indicates the extent of the contribution made by the Divinity School to the general work of the University. This interchange between the two Faculties in 1910-11 was as follows: —

Divinity students electing courses offered primarily by the Faculty of Arts and Sciences: —

Semitic	1 election.
Egyptology	1 "
Greek	1 "
Classical Philology	1 "
English	1 "
German	1 "
French	3 elections.
History	1 election.
Government	4 elections.
Economics	11 "
Philosophy	39 "
Social Ethics	9 "

Non-Divinity students electing courses offered primarily by the Divinity School: —

Old Testament	32 elections.
Church History	158 "
History of Religions	19 "
Theology	5 "
Ethics	106 "
	—
	320

The interchange of instruction between the Harvard Divinity School and Andover Theological Seminary was as follows: —

Harvard Divinity students electing courses offered primarily by Andover Theological Seminary: —

Old Testament	2 elections.
New Testament	8 "
Church History	10 "
Theology	5 "
Homiletics	15 "
	—
	40

Andover students electing courses offered primarily by the Divinity School: —

Old Testament	4 elections.
New Testament	6 "
Church History	3 "
History of Religions	5 "
Theology	1 election.
Ethics	3 elections.
Homiletics	7 "
	—
	29

Six members of the School received the degree of S.T.B. (one *cum laude*), eleven the degree of A.M., and one the degree of Ph.D. The degree of A.M. was also conferred, in February, upon one person for work done in the Divinity School in the year 1908-09.

The following is a list of the Courses of Instruction given in the School in the year 1910-11. With each course is a statement of the number of students electing it from the Divinity School, Andover Theological Seminary, the Graduate School of Arts and Sciences, Harvard College, and Radcliffe College. In such Andover courses as were taken only by Andover students, no record of attendance is given. A list of the lectures delivered in the Lowell Institute course in King's Chapel is appended to the list of regular courses.

COURSES OF INSTRUCTION

OLD TESTAMENT

1. Dr. DAVEY.—Hebrew.—Morphology. Selections from the prose narratives of the Old Testament. *First half-year.* 2 Div., 6 Col.
2. Professor LYON.—Hebrew (second course).—Syntax. Extensive reading in the Old Testament. *Second half-year.* 1 Div., 5 Col.
18. Dr. DAVEY.—Classical Aramaic (Syriac).—Brockelmann's Syrische Grammatik; selections from the Peshitto; Syriac prose of the classical period. 1 Div., 1 Col.
4. Professor LYON.—History of Israel, political and social, till the capture of Jerusalem by the Romans. 5 Div., 15 Col.
5. Professor G. F. MOORE.—History of Jewish Literature from the earliest times to 200 A.D. 4 Div., 4 And., 3 Col.
- A6. Professor ARNOLD.—Religion of Israel.—History of the religious ideas and institutions of Israel from the earliest times to the Maccabean age. 2 Div., 9 And.
10. Professor LYON.—Assyrian. 1 Col.
20. Professor LYON, Professor G. F. MOORE.—Research courses. 1 Div., 1 Gr.

NEW TESTAMENT

2. Professor ROPES.—Introduction to the Study of the New Testament. *First half-year:* The origin and early history of the New Testament writings. *Second half-year:* The teaching of Jesus Christ, and the theological and ethical ideas of the New Testament writers. 7 Div., 4 And.
3. Professor ROPES.—The Gospels of Matthew, Mark, and Luke. 4 Div., 1 And.
- A7 ¹/₂f. Professor RYDER.—The Acts of the Apostles. *Half-course (first half-year).* 3 Div., 1 And.
- A8 ³/₄f. Professor RYDER.—The Epistle to the Romans. *Half-course (second half-year).* 2 Div.
- 15 ¹/₂f. Professor FENN.—The Theological Method of Jesus and Paul. *Half-course (first half-year).* 6 Div., 1 And.
- A16 ¹/₂f. Professor HINCKS.—New Testament Religion. *Half-course (first half-year).*
- A19 ³/₄f. Professor RYDER.—The Epistle to the Hebrews. *Half-course (second half-year).* 3 Div., 1 And.

CHURCH HISTORY

- A1. Professor PLATNER.—History of the Church in Outline. 3 Div., 9 And., 1 Col.
- 3a ¹/₂f. Professor EMERTON.—The Era of the Reformation in Europe. First part: from the rise of Italian Humanism to the Council of Basel (1350-1448). *Half-course (first half-year).* 1 Div., 5 Gr., 13 Col.
- 4a ¹/₂f. Professor E. C. MOORE.—The History of the Christian Church in Europe within the last three Centuries. *Half-course (first half-year).* 1 Div., 2 And., 55 Col.

- 4b ¹/₂f. Professor E. C. MOORE. — The Expansion of Christendom in the Nineteenth Century. *Half-course (second half-year)*.
3 Div., 1 And., 79 Col.
- A3. Professor PLATNER. — Christian Institutions. — An historical and comparative study of the organisation and government, the forms of worship, and the doctrinal standards of the main branches of the Christian Church. 5 Div., 3 And., 2 Gr.
- A4 ¹/₂f. Professor PLATNER. — History of the Church in England. *Half-course (first half-year)*. 1 Div., 1 And.
- A5 ¹/₂f. Professor PLATNER. — History of the Church in America. *Half-course (second half-year)*. 1 Div., 1 And., 1 Col.
- 5f. Professor EMERTON. — History of Christian Thought, considered in its relation to the prevailing philosophy of each period from the earliest time to the Eighteenth Century. *First half-year*. 3 Div., 1 Col.
- 6 ¹/₂f. Professor EMERTON. — Practice in the Study and Use of Materials for Church History. *Half-course (first half-year)*. 1 Gr.

HISTORY OF RELIGIONS

2. Professor G. F. MOORE. — History of Religions in Outline. 18 Div., 3 And., 1 Gr., 14 Col.
- 4 ¹/₂f. Professor G. F. MOORE. — History of Judaism. *Half-course (second half-year)*. 4 Div., 3 Col.
- 5 ¹/₂f. Professor G. F. MOORE. — Islam. — The Life of Mohammed; the Koran; the Moslem conquests; Mohammedan law and theology. *Half-course (first half-year)*. 5 Div., 2 And., 1 Col.

THEOLOGY

- 1 ¹/₂f. Professor FENN. — Theism. *Half-course (first half-year)*. 5 Div., 1 Gr.
- A1 ¹/₂f. Professor EVANS. — The Philosophic Basis of the Christian Religion. *Half-course (second half-year)*. 1 Div., 3 And.
- 2^a. Professor FENN. — Outlines of Systematic Theology. *Second half-year*. 6 Div.
- A ¹/₂f. Professor EVANS. — Systematic Theology. The Distinctive Truths of Christianity. *Half-course (second half-year)*. 4 Div., 8 And.
- 3 ¹/₂f. Professor FENN. — New England Theology. *Half-course (first half-year)*. 4 Div.
7. Professor E. C. MOORE. — Philosophy of Religion. 15 Div., 1 And., 1 Gr., 1 Col.
- 20a ¹/₂f. Professor E. C. MOORE. — Modern Theology, especially as influenced by Ritschl: a survey of constructive work in Theology during the last twenty years in Germany, England, and America. Lectures, reading, and reports. *Half-course (second half-year)*. 2 Div., 1 Col., 1 Rad.

COURSES OF INSTRUCTION

OLD TESTAMENT

- 1¹. Dr. DAVEY.—Hebrew.—Morphology. Selections from the prose narratives of the Old Testament. *First half-year.* 2 Div., 6 Col.
- 2². Professor LYON.—Hebrew (second course).—Syntax. Extensive reading in the Old Testament. *Second half-year.* 1 Div., 5 Col.
18. Dr. DAVEY.—Classical Aramaic (Syriac).—Brockelmann's *Syrische Grammatik*; selections from the Peshitto; Syriac prose of the classical period. 1 Div., 1 Col.
4. Professor LYON.—History of Israel, political and social, till the capture of Jerusalem by the Romans. 5 Div., 15 Col.
5. Professor G. F. MOORE.—History of Jewish Literature from the earliest times to 200 A.D. 4 Div., 4 And., 3 Col.
- A6. Professor ARNOLD.—Religion of Israel.—History of the religious ideas and institutions of Israel from the earliest times to the Maccabean age. 2 Div., 9 And.
10. Professor LYON.—Assyrian. 1 Col.
20. Professor LYON, Professor G. F. MOORE.—Research courses. 1 Div., 1 Gr.

NEW TESTAMENT

2. Professor ROPES.—Introduction to the Study of the New Testament. *First half-year:* The origin and early history of the New Testament writings. *Second half-year:* The teaching of Jesus Christ, and the theological and ethical ideas of the New Testament writers. 7 Div., 4 And.
3. Professor ROPES.—The Gospels of Matthew, Mark, and Luke. 4 Div., 1 And.
- A7 ¹/₂f. Professor RYDER.—The Acts of the Apostles. *Half-course (first half-year).* 3 Div., 1 And.
- A8 ²/₃f. Professor RYDER.—The Epistle to the Romans. *Half-course (second half-year).* 2 Div.
- 15 ¹/₂f. Professor FENN.—The Theological Method of Jesus and Paul. *Half-course (first half-year).* 6 Div., 1 And.
- A16 ¹/₂f. Professor HINCKS.—New Testament Religion. *Half-course (first half-year).*
- A19 ²/₃f. Professor RYDER.—The Epistle to the Hebrews. *Half-course (second half-year).* 3 Div., 1 And.

CHURCH HISTORY

- A1. Professor PLATNER.—History of the Church in Outline. 3 Div., 9 And., 1 Col.
- 3a ¹/₂f. Professor EMERTON.—The Era of the Reformation in Europe. First part: from the rise of Italian Humanism to the Council of Basel (1350–1448). *Half-course (first half-year).* 1 Div., 5 Gr., 13 Col.
- 4a ¹/₂f. Professor E. C. MOORE.—The History of the Christian Church in Europe within the last three Centuries. *Half-course (first half-year).* 1 Div., 2 And., 55 Col.

- 4b ³/₄. Professor E. C. MOORE. — The Expansion of Christendom in the Nineteenth Century. *Half-course (second half-year)*.
3 Div., 1 And., 79 Col.
- A3. Professor PLATNER. — Christian Institutions. — An historical and comparative study of the organization and government, the forms of worship, and the doctrinal standards of the main branches of the Christian Church. 5 Div., 3 And., 2 Gr.
- A4 ¹/₄. Professor PLATNER. — History of the Church in England. *Half-course (first half-year)*. 1 Div., 1 And.
- A5 ³/₄. Professor PLATNER. — History of the Church in America. *Half-course (second half-year)*. 1 Div., 1 And., 1 Col.
5. Professor EMERTON. — History of Christian Thought, considered in its relation to the prevailing philosophy of each period from the earliest time to the Eighteenth Century. *First half-year*. 3 Div., 1 Col.
- 6 ¹/₄. Professor EMERTON. — Practice in the Study and Use of Materials for Church History. *Half-course (first half-year)*. 1 Gr.

HISTORY OF RELIGIONS

2. Professor G. F. MOORE. — History of Religions in Outline. 18 Div., 3 And., 1 Gr., 14 Col.
- 4 ³/₄. Professor G. F. MOORE. — History of Judaism. *Half-course (second half-year)*. 4 Div., 3 Col.
- 5 ¹/₄. Professor G. F. MOORE. — Islam. — The Life of Mohammed; the Koran; the Moslem conquests; Mohammedan law and theology. *Half-course (first half-year)*. 5 Div., 2 And., 1 Col.

THEOLOGY

- 1 ¹/₄. Professor FENN. — Theism. *Half-course (first half-year)*. 5 Div., 1 Gr.
- A1 ³/₄. Professor EVANS. — The Philosophic Basis of the Christian Religion. *Half-course (second half-year)*. 1 Div., 3 And.
- 2 ¹/₄. Professor FENN. — Outlines of Systematic Theology. *Second half-year*. 6 Div.
- A ³/₄. Professor EVANS. — Systematic Theology. The Distinctive Truths of Christianity. *Half-course (second half-year)*. 4 Div., 8 And.
- 3 ¹/₄. Professor FENN. — New England Theology. *Half-course (first half-year)*. 4 Div.
7. Professor E. C. MOORE. — Philosophy of Religion. 15 Div., 1 And., 1 Gr., 1 Col.
- 20a ³/₄. Professor E. C. MOORE. — Modern Theology, especially as influenced by Ritschl: a survey of constructive work in Theology during the last twenty years in Germany, England, and America. Lectures, reading, and reports. *Half-course (second half-year)*. 2 Div., 1 Col., 1 Rad.

THE LAW SCHOOL

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — I have the honor to present my report upon the Law School for the academic year 1910–11.

The first table below shows the growth of the School from year to year since 1870 in the number of students, the number and percentages of college graduates, and the number of colleges represented by their graduates. A feature of this growth which will gratify the friends of the School is the steady increase in the number of graduates of other colleges than Harvard, and in the number of colleges represented. The fact that all parts of the country are so well represented in the student body cannot fail to be of much benefit both to the students and to the institution.

The second table gives the courses of study and instruction during the year, the text-books used, the number of weekly exercises in each course, and the number of students who offered themselves for examination in each course at the end of the year.

During the twelve months from August 1, 1910, to August 1, 1911, 6,260 volumes and 586 pamphlets were added to the library. On August 1, 1911, the library contained about 126,860 volumes and about 13,976 pamphlets. The increase of purchase over the previous year was due in part to the fact that purchases were delayed on account of Mr. Ames's death which would otherwise have been made during the year 1909–10.

One of the most important additions to the library during the year was the collection of *Bar Association Proceedings* belonging to Francis Rawle, Esq., of Philadelphia. This remarkable collection contained many volumes which it is practically impossible to find at the present time. The School has been trying for a long time to fill the gaps in its collection, but up to last year more than one hundred volumes were still lacking. By this purchase we have obtained substantially all these rare volumes, and we shall have no difficulty in disposing of the duplicates to good advantage. The library now contains what is believed to be the only complete collection of *Bar Association Proceedings* in existence. These volumes contain valuable matter, the importance of which is likely to increase in the future.

Year	Whole No. of Students	Total of College Graduates	Harvard Gradu- ates	Graduates of other Colleges	Non- Gradu- ates	Per cent of College Graduates	No. of Col- leges rep- resented
1870-71	165	77	27	50	88	47	27
1871-72	138	70	34	36	68	51	25
1872-73	117	66	34	32	51	56	25
1873-74	141	86	49	37	55	61	25
1874-75	144	82	63	19	62	57	18
1875-76	173	98	60	33	80	54	25
1876-77	199	116	74	42	83	58	30
1877-78	196	121	80	41	75	62	30
1878-79	169	109	71	38	60	64	24
1879-80	177	118	90	28	59	66	20
1880-81	161	112	82	30	49	70	19
1881-82	161	99	66	33	62	61	22
1882-83	138	98	58	35	45	67	32
1883-84	150	105	75	30	45	70	25
1884-85	156	122	85	37	34	78	31
1885-86	158	122	88	39	36	77	29
1886-87	188	143	88	55	45	76	34
1887-88	225	158	102	56	67	70	32
1888-89	225	158	105	53	67	70	32
1889-90	262	189	122	67	73	72	41
1890-91	285	200	135	65	85	70	33
1891-92	370	257	140	117	113	69	48
1892-93	405	266	132	134	139	66	54
1893-94	367	279	129	150	88	76	56
1894-95	413	310	139	171	103	75	74
1895-96	475	380	171	209	95	80	82
1896-97	490	408	186	222	82	83	82
1897-98	551	490	229	261	61	89	77
1898-99	564	508	212	291	61	89	78
1899-00	613	557	236	321	56	91	67
1900-01	655	605	252	353	50	92	83
1901-02	638	584	247	337	49	92	92
1902-03	644	600	241	359	44	93	94
1903-04	743	695	272	423	48	94	111
1904-05	766	711	286	425	55	93	114
1905-06	727	716	295	421	11	98	113
1906-07	705	696	260	436	9	99	126
1907-08	719	712	276	436	7	99	122
1908-09	690	680	256	424	10	99	121
1909-10	765	759	257	502	6	99	127
1910-11	790	778	240	538	12	98	135
1911-12*	808	795	215†	580	13‡	98	145

Other important additions to the library were collections of very rare early Acts of Massachusetts, New Hampshire, and Ohio; a large collection of early English Colonial Laws; an almost complete set of the Pennsylvania District Ordinances;

* Up to October 30, 1911.

† 21 Harvard Seniors who have completed the full College course, but have not received their diplomas, are reckoned as graduates. Prior to 1905-06 Harvard Seniors were not reckoned as graduates but as non-graduates.

‡ Eight of the thirteen non-graduates are graduates of law schools.

Instructors	Studies and Text-books	Exercises per week	Number of students examined
First Year			
Prof. Wambaugh and Mr. Joseph Warren }	Agency. Wambaugh's Cases on Agency	2	324
Asst. Prof. Scott	Civil Procedure at Common Law. Ames's Cases on Pleading (2d ed.)	2	309
Prof. Williston }	Contracts. Williston's Cases on Contracts	3	305
Prof. Wyman }			
Prof. Beale and Asst. Prof. Scott }	Criminal Law and Procedure. Beale's Cases on Criminal Law (2d ed.) . . .	2	302
Prof. Warren	Property. Gray's Cases on Property, vols. 1, 2 (2d ed.)	2	322
Prof. Thayer	Torts. Cases on Torts: Ames, vol. 1 (3d ed.), Smith, vol. 2 (2d ed.)	2	317
Second Year			
Prof. Brannan	Bills of Exchange and Promissory Notes. Ames's Cases on Bills and Notes and Brannan's Negotiable Instruments Law	2	90
Prof. Thayer	Evidence. Thayer's Cases on Evidence (2d ed.)	2	266
Prof. Pound	Jurisdiction and Procedure in Equity. Ames's Cases in Equity Jurisdiction, vol. 1	2	267
Prof. Gray and Mr. Gray	Property. Gray's Cases on Property, vols. 3, 4 (2d ed.)	2	269
Prof. Williston	Sales of Personal Property. Williston's Cases on Sales	2	256
Mr. Dutch	Admiralty. Ames's Cases on Admiralty	1	7
Prof. Williston	Bankruptcy. Williston's Cases on Bankruptcy	1	41
Prof. Beale	Carriers. Beale's Cases on Carriers (2d ed.)	1	198
Prof. Wambaugh	Insurance. Wambaugh's Cases on Insurance	1	63
Prof. Brannan	Damages. Beale's Cases on Damages (2d ed.)	1	14
Mr. Joseph Warren	Persons. Smith's Cases on Persons	1	19
Prof. Wyman	Public Service Companies. Wyman's Cases on Public Service Companies (2d ed.)	1	189
Prof. Pound	Quasi-Contracts. Scott's Cases on Quasi-Contracts	1	19

Third Year

Prof. Beale	Conflict of Laws. Beale's Cases on the Conflict of Laws	2	168
Prof. Wambaugh	Constitutional Law. Thayer's Cases on Constitutional Law	2	102
Prof. Warren	Corporations. Warren's Cases on Private Corporations	2	191
Prof. Brannan	Partnership. Ames's Cases on Partnership	2	22
Prof. Gray	Property. Gray's Cases on Property, vols. 5, 6 (2d ed.)	2	59
Prof. Wyman	Suretyship and Mortgage. Ames's Cases on Suretyship. Wyman's Cases on Mortgage (revised ed.)	2	106
Ast. Prof. Scott	Trusts. Ames's Cases on Trusts (2d ed.)	2	170
Prof. Brannan	Bills of Exchange and Promissory Notes. Ames's Cases on Bills and Notes and Brannan's Negotiable Instruments Law	2	18
Prof. Thayer	Evidence. Thayer's Cases on Evidence	2	5
Prof. Pound	Jurisdiction and Procedure in Equity. Ames's Cases in Equity Jurisdiction, vol. 1 Property II. Gray's Cases on Property, vols. 3, 4 (2d ed.)	2	1
Prof. Gray and Mr. Gray	Sales of Personal Property. Williston's Cases on Sales	2	6
Prof. Williston	Admiralty. Ames's Cases on Admiralty	2	5
Mr. Dutch	Bankruptcy. Williston's Cases on Bankruptcy	1	2
Prof. Williston	Carriers. Beale's Cases on Carriers	1	62
Prof. Beale	Damages. Beale's Cases on Damages	1	10
Prof. Brannan	Equity III. Ames's Cases in Equity Jurisdiction, vol. 2	1	28
Prof. Pound	Insurance. Wambaugh's Cases on Insurance	1	113
Prof. Wambaugh	Municipal Corporations. Smith's Cases on Municipal Corporations	1	32
Prof. Beale	Public Service Companies. Wyman's Cases on Public Service Companies	1	33
Prof. Wyman	Persons. Smith's Cases on Persons	1	9
Mr. Joseph Warren	Quasi-Contracts. Scott's Cases on Quasi-Contracts	1	15
Prof. Pound		1	7
Fourth Year			
Prof. Wyman	Administrative Law. Goodnow's Cases on Administrative Law and Cases on Officers	1	1
Prof. Beale	History of the Common Law. No text-book	1	1
Prof. Wambaugh	International Law. Scott's Cases on International Law	1	2
Prof. Beale	Jurisprudence. No text-book	1	3
Prof. Pound	Roman Law. No text-book	2	1

15 volumes of early Constitutional Convention Proceedings; Pynson's *Nova Statuta* of 1496-97; an edition of the tract entitled "Diversity of Courts," printed by Pynson in 1526; a first edition of Fitzherbert's *Book of Justices*; and a collection in 477 volumes of the Reports of the Supreme Court and the Courts of Appeal of the Argentine Republic.

The collection of portraits of judges and lawyers has been increased during the year by 7 engravings, 6 photographs, 1 photographure, and 1 lithograph. Four colored prints of buildings were also added.

It was voted by the Faculty that beginning with the year 1911-12, every candidate for the degree of Bachelor of Laws will be required to take twelve hours a week in the second year, instead of ten hours a week as heretofore. It was also voted that hereafter students in the second year shall not be allowed to remain in the School unless they obtain an average on the work of that year at least five per cent higher than the usual passing mark. This is additional to the existing requirement that no student may remain in the School who has more than two conditions standing against him, and carries further the policy of making a high standard of capacity and diligence a condition of remaining in the School. The wisdom of this policy has been confirmed by experience.

As will be seen by the table, the courses in Criminal Law and in Civil Procedure have each been extended to cover two hours a week.

During the year an additional scholarship with an income of \$250 has been established through the generosity of anonymous friends of the School. The purpose of this scholarship is to encourage research in problems of law reform, and it is to be awarded to a student of the fourth-year class who, in the opinion of the Faculty, gives promise of ability to do effective work in the investigation of such problems. The holder will be required to write a dissertation embodying the results of his study. This scholarship has already been awarded to a graduate of the Class of 1911.

With the approval of the Corporation the Faculty voted to offer two prizes of \$200 and \$100 respectively to the winners of a competition between law clubs in the second-year class. These prizes were offered from the income of the gift of \$10,000 made by Mrs. James Barr Ames in fulfilment of a wish expressed by Mr. Ames, and mentioned in last year's report. This use of the

income from Mr. Ames's generous gift was deemed appropriate in view of the great interest which he always felt in the law clubs. The competition should result in substantial benefit to the work of the law clubs, both of the first and second year. It will hereafter be open only to second-year clubs, the members of which have attended faithfully and systematically to their law club work during their first year.

The Board of Advisers appointed, as explained in the last report, from the third-year class, has the task of regulating the competition, and of supervising the work of the first-year law clubs in order to see that it is kept up to the required standard of excellence. Last year's experience gave good reason for believing that the advisers can help the first-year men greatly both in their law club work and in other ways. The duties of the board have been extended this year, and the membership has been increased to eight.

EZRA RIPLEY THAYER, *Dean.*

THE FACULTY OF MEDICINE

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — As Dean of the Faculty of Medicine, I have the honor to present my report for the academic year 1910–11.

In recent years there has been a steady increase in the number of physicians taking courses in the Medical School. Such of these courses as are offered in the summer months, constituting a Summer School of Medicine, were reorganized in 1908–09 with a Director in charge, and this form of organization has been a success. During the present year, the Faculty voted to organize graduate courses into a definite subdivision of the Faculty of Medicine, with a Dean, and an administrative board in charge, and this form of organization will be put into effect during the next year. It is believed that many improvements in the courses will result from this change, and that an important part of the work of a Medical School, namely, furnishing to physicians the opportunity of improving their equipment for work, will be developed more systematically.

Last year announcement was made of courses leading to the degree of Doctor of Public Health. During this year, eight students registered in these courses, and to two the degree was awarded in June. This new degree appears to have aroused much interest, and the character of preparation and work determined upon as the requirement for this degree very generally has been commended.

The report of the first year of Dr. Dexter's work as Director of Scholarships indicates that this form of administration of student aid has been a success. Many conferences were held by Dr. Dexter with students seeking aid, and, in addition to those receiving scholarships, twenty-six men were helped with \$2,225, very largely in the form of loans. Sums of money, large or small, can, I am confident, be used wisely through Dr. Dexter to aid deserving students.

Last year's report made mention of a close affiliation between the Peter Bent Brigham Hospital and the Harvard Medical School. During the current year, similar affiliations were made with other hospitals, so that in addition to the Peter Bent Brigham Hospital, the Children's Hospital, the Infants' Hospital, the Infants' Asylum, the Children's Department of the Boston Dis-

pensary, and the Free Hospital for Women are now organized with the continuous service plan, the Chief-of-Staff in each case appointed on nomination from the Medical School. This insures to the Medical School ample clinical facilities to which men desired to fill positions in the Medical School may be called, with no limitations as to their place of residence. Now the same freedom of choice in clinical teachers is possible that has long existed in the case of laboratory teachers. Such hospitals constitute a very considerable addition to the plant available to the Harvard Medical School for teaching and investigation, and give the opportunity for the development of the clinical branches on a scale commensurate with that of the laboratory branches, provided the necessary endowment is procured. Enlarged opportunities call for increased funds. It is believed that new and large sums of money can be wisely expended in connection with these developments, and must be forthcoming if the Harvard Medical School is to develop symmetrically and broadly. Friends of the School have provided a splendid group of buildings and means of maintenance for the laboratory departments, which we believe is being used well. Similar generosity is now asked for the clinical departments.

Construction began during the year on the Peter Bent Brigham, the Infants', and the Collis P. Huntington Memorial Hospitals, all on land immediately adjacent to the Medical School buildings. Of these the Collis P. Huntington Memorial Hospital is for the investigation of cancer under the auspices of the Cancer Commission of Harvard University. Funds for its erection were secured through the enthusiastic efforts of Dr. J. Collins Warren, who already in many ways has rendered inestimable service to the Medical School.

Assistant Professor Wolbach spent a portion of the year on the West Coast of Africa in company with Dr. J. L. Todd of McGill University, the two making up an expedition under the auspices of the Liverpool School of Tropical Medicine. They studied sleeping sickness, and other protozoan diseases, collecting much material for subsequent investigation and instruction. Such an expedition is a new activity for the Medical School.

Through the generosity of Dr. F. C. Shattuck, the Henry P. Walcott Fellowship in Clinical Medicine has been established, paying a stipend of \$1000, to enable some recent graduate to conduct clinical investigation. In its purpose, in its name, and from its donor, this Fellowship is most welcome.

During the year the Rebecca A. Greene bequest of \$25,000 for general Medical School purposes became available. Such unrestricted gifts are particularly useful to the School. There have been also many gifts for immediate use for various special purposes, aggregating in all \$27,239.90. These gifts make possible much investigation that could not be undertaken otherwise.

No great changes have been made during the year 1910-11 in methods of instruction. The death of three of the officers of the Medical School, Dr. Thomas Dwight, Parkman Professor of Anatomy; Dr. Walter R. Brinkerhoff, Assistant Professor of Pathology, and Dr. Emma W. Mooers, Custodian of the Neuropathological Collection, have brought changes in the School that will be long felt.

In February and June 101 men were recommended to the President and Fellows for degrees:—

Medical School	{	For the degree of M.D. (February)	8
		“ “ “ <i>cum laude</i> (February)	1
		“ “ “ (June)	61
		“ “ “ <i>cum laude</i> (June)	17
		“ “ Dr.P.H. (June)	2
			89
Dental School	{	For the degree of D.M.D. (February)	0
		“ “ “ (June)	10
		“ “ “ <i>cum laude</i> (June)	2
			12
Total			101

HENRY A. CHRISTIAN, *Dean.*

THE MEDICAL SCHOOL

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — As Dean of the Medical School I have the honor of presenting my report for the academic year 1910–11.

The Administrative Board was constituted as follows: Drs. H. A. Christian, C. M. Green, F. B. Harrington, G. G. Sears, F. B. Mallory, J. L. Morse, W. B. Cannon, John Warren, and E. E. Southard.

The Faculty Council was composed of the following: Drs. H. A. Christian, W. T. Councilman, G. G. Sears, Myles Standish, W. B. Cannon, John Warren (Secretary), J. B. Blake, and the President of the University.

Buildings and Grounds. — Numerous minor changes have been made in the various buildings. On the roof of Building E a commodious animal house has been erected for the use of the Department of Surgery. In the rear of Building B, two lawn tennis courts have been built by the Athletic Association of the University.

Anatomy. — The Department of Anatomy has suffered a great loss in the death of Professor Dwight. Dr. Dwight had been connected with the Medical School since 1872 as a teacher of Anatomy, and for twenty-eight years had served as Parkman Professor of Anatomy, having succeeded Dr. Oliver Wendell Holmes in 1883. Dr. Dwight had done very much to develop the teaching and research work in the Department, and had made most valuable additions to its collections and to the Anatomical part of the Museum of the School. As a teacher and investigator he will be a great loss to the Department and to the Medical School. In 1910–11 Professor Dwight gave all the regular lectures of the first-year course. In spite of the fact that his physical condition was such as to cause most men to give up work, his abilities as a lecturer were never seen to better advantage. He also added to his former communications on variations in the bones, and among other contributions reported a case of a secondary cuboid bone in both feet, which is practically unique. He continued to take an active share in the administration of his Department until the end.

Dr. Warren has published studies on the paraphysis and pineal region in reptilia, and Dr. Z. B. Adams on the relations of the

articular process of the vertebrae in the production of congenital scoliosis.

The first-year course in Anatomy has been rearranged so that dental and medical students will receive separate instruction, and the work for each has been modified in a way to improve this instruction.

Physiology. — Instruction has been improved by total separation of medical and dental students. This change has permitted trying the experiment of giving to adequately trained medical students the alternatives of routine laboratory work, and special research. In consequence, nine students of medicine were engaged in investigation during the course. Of these Messrs. A. T. Shohl and W. S. Wright finished with Professor Cannon an investigation on emotional glycosuria; J. C. Aub and C. A. L. Binger secured interesting results in observations on the effect of nicotine on the secretion of the adrenal glands; Mr. A. L. Washburn obtained important evidence as to the nature of hunger.

The Staff of the Department has been carrying on researches while not engaged in teaching as follows: Mr. E. L. Porter on irritability of the central nervous system; Dr. J. B. Ayer on the effects of intrathoracic and atmospheric pressure on cardiac activity; Assistant Professor Martin on the standardization of electrical stimulation and the application of these methods to physiological problems; Dr. Alexander Forbes on the dynamics of inhibition and stimulation in spinal reflexes; Professor Cannon on the mechanical factors of digestion, and with Dr. D. de la Paz on the influence of emotional states on adrenal secretion, and with Dr. R. G. Hoskins on the effects of asphyxia, hyperpnoea, and sensory stimulation on the activity of the adrenal glands.

During the year the laboratory was also used by Dr. Hoskins (Professor of Physiology at Starling-Ohio Medical College), in a critical investigation of biological methods of testing for epinephrin, and by Drs. F. T. Murphy and Beth Vincent in a study of the cause of death in intestinal obstruction.

Comparative Physiology. — The following investigations were conducted during the year: Dr. Russell Richardson, an instrument for measuring the blood flow through perfused organs; Drs. W. M. Boothby and A. Ehrenfried, the technique used in the transplantation of organs, and an improved apparatus for anaesthesia; Miss A. H. Turner (Associate Professor of Zoölogy at Mt. Holyoke College), the electrical properties of muscle, and, with Professor Porter, the nervous control of respiration. Pro-

fessor Porter worked out improvements in certain physiological apparatus, and confirmed by a new method his discovery of the vasoconstrictor nerves of the heart.

Bacteriology. — The particularly notable event was the taking up of his duties by Assistant Professor Wolbach in the autumn of 1910, and his departure on the expedition of the Liverpool School of Tropical Medicine to the Gambia, holding the added position of Sheldon Travelling Fellow. During the year Assistant Professor Wolbach has published papers on swamp fever in horses (with J. L. Todd), cell inclusions in granulomatous lesions, trachoma (with S. H. McKee) and colophonium in certain staining reactions. A considerable part of the work on several of these papers was done in this laboratory. The results of the expedition to the Gambia are being worked out, and the first report on the diagnosis and distribution of human trypanosomiasis in the Gambia has been published. Subsequent reports will deal with parasitic protozoa found in animals, a malarial index of the Gambia, chronic ulcers, and filtration experiments with trypanosomes. Collateral work of Dr. Wolbach's part of the expedition was the collecting of flies for Professor Thaxter, and a considerable number of insects and small animals for the Museum of Comparative Zoölogy in Cambridge, so that the benefits of the expedition extend beyond the Medical School.

The work of the Department has gone on as usual, with a fair degree of success.

Pathology. — During the past year the laboratory has suffered a great loss in the death of Assistant Professor Brinckerhoff. Dr. Brinckerhoff, after serving as an assistant here in Pathology, took charge of the United States Government Station for the Investigation of Leprosy at Molokai, where he remained for four years, until his appointment as Assistant Professor of Pathology at Harvard. He was an able and indefatigable investigator and an unusual teacher, combining rare skill in the orderly presentation of knowledge with the faculty of stimulating enthusiasm in the student. The place made vacant by the death of Dr. Brinckerhoff has been filled by the appointment of Dr. Howard T. Karsner, formerly a teacher in the University of Pennsylvania. Assistant Professor Karsner's work in the Department will be principally in experimental pathology. Dr. Richards resigned his position as Instructor in Pathology to accept a position in Clinical Medicine in the newly organized Department of Medicine in the University of Minnesota.

The laboratory continues to render a valuable service to physicians and to hospitals without a pathological department in making post-mortem examinations and in examining material. During the past year there have been 191 post-mortem examinations, and 980 specimens have been examined and reported upon. The cost of conducting this work is to some extent met by charges, and the material so obtained is of great service in teaching.

The pathological laboratories of the Massachusetts General Hospital and the Boston City Hospital render a valuable service, being used chiefly in teaching students in elective and graduate courses.

Comparative Pathology.—At the beginning of the year the Department lost the services of Dr. E. L. Walker, who accepted a position with the Philippine Government, for which he was to continue his researches in medical zoölogy. Dr. Walker was an indefatigable worker here, and the author of a number of papers.

During the year seven publications appeared from the Department, and several others were nearly ready for the press. Mr. J. H. Brown, assisted by a grant from the Rockefeller Institute for Medical Research, studied a number of cultures of anaerobic bacteria. A considerable amount of work was done, with the aid of a fund generously contributed by several persons, upon the possible relation of infantile paralysis to household pets and other domestic animals. In this work Mr. Carlon Ten Broeck gave very material assistance.

Preventive Medicine and Hygiene.—The degree of Doctor of Public Health was awarded to Dr. Edward B. Beasley, who presented a thesis entitled "An Investigation on the Permeability of Slow Sand Filters to *Bacillus Typhosus*," and to Dr. Arthur I. Kendall, with a thesis upon "Certain Fundamental Principles Relating to the Activity of Bacteria in the Intestinal Tract: Their Relation to Therapeutics." Dr. F. M. Allen, Charles Follen Folsom Teaching Fellow, continued his study of metabolism in relation to infection; Drs. W. P. Lucas and H. L. Amoss investigated the vaccine treatment in the prevention of dysentery; Dr. A. I. Kendall continued his studies upon intestinal bacteria, and published a number of papers. In some of the publications Dr. Kendall has been associated with Drs. C. A. Herter, A. W. Walker, R. M. Smith, T. M. Rotch, A. A. Day, and M. R. Edwards.

Professor Rosenau served on a Commission appointed by Governor Draper to study the milk question and report the draft of a bill to the Legislature. He also completed a study of organic

matter in the expired breath, prepared a section on Tropical Diseases with Dr. J. F. Anderson in a Handbook of Practical Treatment, and with Drs. Amoss and Sheppard conducted experimental investigations on anterior poliomyelitis. Dr. E. H. Schorer, Fellow in Preventive Medicine and Hygiene, is studying milk in its relation to public health, under the auspices of the Milk and Baby Hygiene Association, and in connection with this is investigating various problems of scientific and practical interest.

One of the rooms in the Department has been set aside for a Board of Officers from the United States Navy, who will investigate certain hygienic problems connected with submarine boats.

In numerous ways members of the Department have again taken an active interest in philanthropic and public health movements which have a bearing upon preventive medicine, and have coöperated in the work of several of the public health organizations of the community.

Pharmacology. — Dr. Louis Nelson studied the chemistry of recin; Drs. Emerson and Nelson, the action of caffen and its salts; Dr. D. H. Williams, chaparro amargoso; Dr. L. M. Freedman, the galvanic reaction of nystagmus; and Dr. Hartwell completed his studies on the artificial circulation in the extirpated liver.

Theory and Practice of Physic. — The investigations mentioned in last year's report as being made by Professor Christian and Drs. R. M. Smith, Walker, Talbot, Pratt, Spooner, and C. Frothingham, Jr., were continued, and in large part have been completed and published.

Clinical Medicine. — In February, Dr. James Marsh Jackson, after many years of fruitful service, resigned, and Dr. G. Cheever Shattuck was appointed as Assistant in his place. Dr. C. H. Lawrence, Jr., served through the greater part of the year as Henry P. Walcott Fellow, and the results of his investigations are soon to be published. Only minor changes were made in the general scheme of student instruction. Publications by the members of the Department were numerous, as already listed in the *Gazette*.

Pediatrics. — A notable increase in the teaching service and in the amount of valuable clinical material has been made during the year. Drs. Fritz B. Talbot and Richard M. Smith, Fellows, conduct instruction for fourth-year men and graduates at the Massachusetts General Hospital, where the Department of Chil-

dren has been placed under the direction of Dr. Talbot, assisted by Dr. Smith. Dr. Bowditch has been given charge of the Massachusetts Infants' Asylum, and about thirty beds have thus been rendered available for teaching throughout the year. In like manner Dr. Lucas has been appointed to a continuous service in the Children's Department of the Boston Dispensary, which not only renders available for teaching purposes a clinic amounting to about 11,000 children in the year, but will also later add to the teaching service about thirty hospital beds.

Publications from members of the Department have been reported in the *Gazette*. Among these are papers by Professor Rotch, Assistant Professor Morse, and Drs. Ladd, Dunn, Bowditch, Lucas, Talbot, Smith, and Place.

Surgery. — The Department has to report with regret the resignation of Dr. F. T. Murphy, who resigned his position as Assistant in Surgery to become Professor of Surgery in Washington University, St. Louis.

The course in genito-urinary surgery previously given in eight lectures at the Medical School, in October and November, was rearranged, and the instruction was given in sixteen clinical lectures at the Boston City Hospital from February to June, by Dr. Paul Thorndike, and the section work was given by Dr. Hugh Cabot at the Massachusetts General Hospital.

The Laboratory of Surgical Research was in continuous use during the year under the immediate charge of Dr. John Homans. Papers based on work done in the laboratory have been published by Drs. Homans, Vincent, Osgood and Lucas, and Quinby, and have been recorded in the *University Gazette*. The facilities of the laboratory have been greatly augmented by the construction of an animal house on the roof of Building E, well equipped for the care of animals. Rooms previously used for this purpose are utilized for other uses.

The Animal Farm noted in the previous report is in operation, and has materially helped not alone the work of the Surgical Department, but the other departments in the Medical School, by facilitating the securing and taking care of animals.

During the year fifty-one papers on surgical subjects were published by the members of the Department of Surgery, and were noted in the *Gazette*.

Obstetrics and Gynaecology. — Instruction in these allied subjects has continued essentially the same as in the preceding year. In clinical teaching the Harvard Medical School is richly pro-

vided for. In Obstetrics, the Boston Lying-in Hospital affords an ample clinic, and each student receives a large amount of clinical instruction. Each group of students has the entire time of a graduate house-officer in the observation and supervision of his work, in addition to the instruction of the visiting staff in pathological cases. In the class receiving the degree in June, 1911, the average number of obstetrical cases attended under supervision and instruction was twenty-two, more than three times the number required for the degree, and this was in addition to numerous cases observed in the work of the Hospital. To still further increase the clinical instruction, the Department has received the generous offer of the Harvard Medical School Alumni Association to provide a salary for an Alumni Assistant, a graduate who will devote the greater part of his time to individual clinical instruction.

In Gynaecology the School has an ample clinic at the Boston Dispensary, the Free Hospital for Women, and the Boston City Hospital. During the year arrangements have been consummated by which the Free Hospital for Women has become closely affiliated with the Harvard Medical School, and Dr. William P. Graves, the Surgeon-in-Chief, has been made a Professor in Gynaecology.

Warren Anatomical Museum.—The chief addition to the Museum was the splendid gift by the late Dr. Charles G. Weld of the Tello collection of ancient trephined Peruvian skulls, numbering about 500 specimens. Another valuable gift was from Dr. Henry O. Feiss of Cleveland, Ohio, of working models showing the mechanism of scoliosis and deformities of the pelvis. The Curator has added about 200 specimens, chiefly of new growths removed in the Surgical Service of the Massachusetts General Hospital. The work of re-carding the specimens has progressed satisfactorily, and adds greatly to the appearance of the shelves.

During the year the Museum lost a devoted friend by the death of Professor Dwight, who gave much of his time to the part devoted to Anatomy, and the collection of variations of bones, especially of the vertebrae, will be a lasting monument to his patience and zeal.

Proctor Fund for the Study of Chronic Diseases.—During the year appropriations were made from this Fund as follows: to Dr. J. H. Pratt for the continuation of his work on the study of pancreatic disease; to Dr. W. P. Lucas for experimental work on the coagulation of the blood; to Dr. F. T. Lord for the con-

tinuation of his work on actinomycosis; to Dr. R. M. Smith for experimental studies on diseases of the heart and kidney; to Dr. R. B. Osgood for the continuation of experimental investigations in poliomyelitis; and to Dr. F. M. Allen for experimental studies of diabetes. \$1000 yearly for four years was appropriated from the accrued income for the care of patients with cancer in the new Huntington Memorial Hospital, which has been erected on the grounds of the Harvard Medical School. It was thought that the use of the Fund for the investigation of cancer was among the purposes for which the Fund was given. In view of the important aid which the Proctor Fund has given to the study of chronic diseases, it is the desire of the Trustees of the Huntington Memorial Hospital to name one of the beds in this Hospital the Proctor Bed.

The Proctor Fund has been of increasing usefulness. The requests for assistance from the Fund have multiplied. Up to the present time it has been used chiefly to further laboratory and experimental investigation of chronic conditions. Its usefulness in the future will be greatly increased by the erection in close relation to the School of the group of hospitals of which the Huntington Memorial Hospital will be the first to be opened.

The Cancer Commission of Harvard University. — Research has been carried on under the direction of Dr. E. E. Tyzzer, who has been studying the nature of immunity reactions to tumors. He has also discovered a group of minute animal parasites, which, though having no direct bearing on the tumor problem, are of biological importance. They represent a new genus, and two distinct species of this genus have been discovered and described.

Dr. E. H. Risley has completed investigations on the serum treatment of cancer, on the diagnostic value of the haemolytic test for cancer, and on the Gilman-Coca vaccine treatment of cancer. His work has been carried on under the direction of the Cancer Commission at the Massachusetts General Hospital, where cordial coöperation in his work has been given by the administrative officers, the Trustees, and the Staff of the Hospital.

The building of the Collis P. Huntington Memorial Hospital, which now nears completion, marks a new era in the activities of this Commission. Primarily designed for the investigation of cancer as it occurs in the human being, it should provide the most approved treatment for a limited number of selected cases which are to remain under constant observation, so as to afford oppor-

tunity for a complete study of each case. The Hospital also furnishes facilities for an out-patient clinic. The more important functions of this Hospital will be to provide for the clinical investigation of cancer, improvement in the care of cancer patients, and facilities for the early diagnosis of the disease. Dr. Thomas Ordway, formerly Director of the Bender Hygienic Laboratory at Albany, New York, will serve as Physician-in-Charge of the Hospital.

Clinic in the Harvard Medical School. — During the year the Clinic has had 4,086 visits from patients for treatment. Of these, 1,511 were visits for the first time, or new patients. The development of the Clinic has been satisfactory. It has been in operation now for one and two-thirds years, gradually increasing in usefulness during this period.

Statistics. — The statistics of the School will be found in the following tables: —

FINAL EXAMINATIONS

	1907			1908			1909			1910			1911		
	Passed	Failed	Total	Passed	Failed	Total	Passed	Failed	Total	Passed	Failed	Total	Passed	Failed	Total
	% Passed	% Failed	% Total	% Passed	% Failed	% Total	% Passed	% Failed	% Total	% Passed	% Failed	% Total	% Passed	% Failed	% Total
FIRST CLASS:—															
Comparative Anatomy	72	10	82	12	79	86	8	51	54	5	57	6	59	8	67
Biological Chemistry	68	11	74	15	64	79	19	47	64	26	63	9	59	11	69
Anatomy	62	13	75	17	65	81	20	54	63	14	62	3	61	6	67
Physiology	77	11	88	12	77	93	17	56	69	18	66	22	66	6	72
SECOND CLASS:—															
Pathological Anatomy	61	4	65	6	66	79	16	84	96	12	53	6	56	3	59
Bacteriology	54	15	69	22	62	84	26	81	93	12	53	3	55	4	63
Hygiene	51	17	68	25	73	78	6	87	90	3	51	6	58	0	58
THIRD CLASS:—															
Theory and Practice	65	1	66	1	60	66	9	60	67	10	98	3	53	2	55
Surgery	64	1	65	1	62	63	5	68	69	1	90	0	50	0	50
Obstetrics	60	7	67	10	58	68	13	69	85	19	84	9	93	10	51
Pediatrics	69	0	69	0	67	67	0	75	0	89	3	92	3	2	58
Dermatology	65	3	68	4	61	65	12	70	77	9	93	2	63	2	55
Gynaecology	65	0	65	0	57	67	15	73	5	77	6	19	94	25	54
Neurology	62	5	67	7	66	4	70	74	2	87	6	98	7	2	57
Therapeutics	59	16	75	21	59	13	72	68	14	82	17	84	10	4	55
Clinical Medicine	62	7	69	10	63	7	70	75	5	80	6	93	3	56	0
Clinical Surgery	63	0	63	0	61	0	61	0	73	0	90	0	54	0	54
Syphilis	66	0	66	0	64	4	68	6	78	0	87	4	91	5	52
Ophthalmology	71	2	73	3	59	7	66	10	80	14	91	3	93	2	51
Otology	65	1	66	1	64	3	67	5	74	0	92	1	53	0	53
Laryngology	64	2	66	3	66	2	68	3	72	1	90	2	53	0	53
Psychiatry	66	0	66	0	65	3	68	4	73	2	91	0	53	0	53

FOURTH CLASS.—ELECTIVES:*

FOURTH CLASS.—ELECTIVES :—																			
Anatomy	40	0	40	0	49	0	49	0	38	1	34	3	30	1	31	1	38	0	38
Comparative Anatomy . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Embryology . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Physiology	1	0	1	0	10	0	10	0	2	0	2	0	0	0	0	0	1	0	1
Comparative Physiology . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Biochemistry	2	0	2	0	5	0	5	0	1	0	1	0	2	0	2	0	2	0	2
Bacteriology . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Pathology	6	0	6	0	14	0	14	0	30	0	30	0	32	0	32	0	42	0	42
Comparative Pathology . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Protozoology . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Neuropathology	2	0	2	0	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Preventive Medicine and Hygiene	6	0	6	0	1	0	1	0	0	0	0	0	8	0	8	0	19	0	19
Pharmacology . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Medicine	66	0	66	0	83	1	84	1	49	1	50	2	111	0	111	0	110	0	110
Theory and Practice	28	0	28	0	45	0	45	0	46	0	46	0	59	0	59	0	68	0	68
Pediatrics	65	0	65	0	70	0	70	0	47	0	47	0	72	0	72	0	93	0	93
Clinical Surgical Pathology	6	0	6	0	2	0	2	0	0	0	0	0	1	0	1	0	3	0	3
Röntgen Ray . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Surgery	66	0	66	0	102	0	102	0	56	1	59	2	94	0	94	0	95	0	95
Genito-Urinary Surgery . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Orthopedics	17	0	17	0	19	0	19	0	21	0	21	0	17	0	17	0	28	0	28
Surgical Pathology	2	0	2	0	2	0	2	0	0	0	0	1	1	0	1	0	0	0	0
Obstetrics	59	0	59	0	58	0	58	0	50	1	51	2	58	0	58	0	73	0	73
Gynaecology	20	0	20	0	25	0	25	0	24	0	24	0	24	0	24	0	40	0	40
Dermatology and Syphilis	8	0	8	0	3	0	3	0	8	0	8	0	1	0	1	0	17	0	17
Neurology and Psychiatry	19	0	19	0	28	0	28	0	11	0	11	0	23	0	23	0	14	0	14
Ophthalmology	1	0	1	0	9	0	9	0	1	0	1	0	3	0	3	0	5	0	5
Otology	1	0	1	0	7	0	7	0	2	0	2	0	2	0	2	0	7	0	7
Laryngology	8	0	8	0	16	0	16	0	11	0	11	0	13	0	13	0	21	0	21

* In the table of electives, not the total number of students taking electives are enumerated, but the number of courses elected. Each course represents the work of one student for a period of one month. Eight electives constitute the work of the fourth year, but a student may take more than one month's work in a single subject. This system of fourth-year work went into effect in 1906.

GENERAL STATISTICS OF THE SCHOOL

Candidates for the Degree of Doctor of Medicine

New matriculants	80
The number of students in attendance:—	
Fourth Class	88
Third Class	46
Second Class	54
First Class	76
Special Students	7
Total	271
Applicants for Degree of M.D. (February)	9
Applicants for Degree of M.D. (June)	81
	90
Rejected	3
Graduated	87

Of the 87 students who received the degree of Doctor of Medicine, 18 received the degree *cum laude*.

Candidates for the Degree of Doctor of Public Health

The number of students in attendance	8
Applicants for Degree of Dr.P.H. (June)	3
Rejected	1
Graduated	2

	SUMMER COURSES					GRADUATE COURSES				
	1907	1908	1909	1910	1911	1906-07	1907-08	1908-09	1909-10	1910-11
Courses taken	281½	178	291	299	510	98½	125	123	151	184
Students . .	194	186	210	197	267	68	81	111	111	153
Receipts . .	\$3401.50	\$4686.50	\$5729.50	\$3622	\$13370	\$2141	\$2932.50	\$3187	\$3905.77	\$4065

Students in courses of the regular medical curriculum . . .	271
Students in Graduate Medical courses	153
Students in Summer Medical courses	267
Students in Doctor of Public Health courses	8
Total students, October 1, 1910, to October 1, 1911, . .	699

HENRY A. CHRISTIAN, *Dean*.

THE DENTAL SCHOOL

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — As Dean of the Dental School I herewith hand you my report for the academic year 1910–11.

The enrolment of students was as follows:—

Graduate students	3
Third-year students	17
Second-year students	89
First-year students	57
	116

In the fall of 1909 our registered students numbered 88. This number was an increase of 24 students over our last registration in the old building on North Grove Street. Our registration for the session of 1910–11 numbered 116, an increase of 28 students over that of the previous year, and a total gain of 52 students since moving into our new building. This showing is a healthy indication of our new environment.

Instruction was given as follows:—

Anatomy.—Professor T. DWIGHT, Asst. Professor WARREN, Demonstrator CHEEVER, Instructors MOSHER and SHEPARD, Assistants FLAGG, HARTWELL, GREEN, BOOTHBY, EHRENFRIED, WHITTEMORE, SMITH, Fellow ADAMS. 424 hours.

Comparative Anatomy.—Professor MINOT, Asst. Professor LEWIS, Demonstrator BREMER, Instructors WILLIAMS, SHEPARD, JOHNSON, Teaching Fellow DANFORTH, Austin Teaching Fellow HEUSER. 252 hours.

Physiology.—Professor CANNON, Instructors MARTIN and FORBES, Fellow AYER, Austin Teaching Fellow PORTER. 348 hours.

Physiological and Dental Chemistry.—Lecturer H. CARLTON SMITH, Assistant C. F. MACDONALD, Jr. (Chemistry). 802 hours.

Bacteriology.—Professor H. C. ERNST, Asst. Professor WOLBACH, Instructor FROTHINGHAM, Assistants PAGE, PERRY, WORTHINGTON, EVERETT, and TOBEY, Austin Teaching Fellow FLOYD. 160 hours.

Materia Medica and Therapeutics.—Professor E. C. BRIGGS, Instructor COOPER. 88 hours.

Dental Pathology.—Professor C. A. BRACKETT. 32 hours.

Neurology.—Instructor TAYLOR. 4 hours.

Crown and Bridge Work.—Professor COOKE, Instructors ELDRED and HOVESTADT. 128 hours.

Orthodontia.—Professor E. H. SMITH, Asst. Professor BAKER, Instructor HOWE. 128 hours.

- Orthodontia, Juniors. — Asst. Professor BAKER. 10 hours.
- Prosthetic Dentistry, Juniors. — Asst. Professor CROSS. 32 hours.
- Prosthetic Dentistry, Laboratory, Seniors. — Asst. Professor CROSS, Instructors HAYDEN, HALEY, L. A. ROGERS, CLARK, LANGLEY, Demonstrator KAZANJIAN. 496 hours.
- Prosthetic Dentistry, Laboratory, Juniors. — Asst. Professor CROSS, Instructors DORT, EAMES, FURBISH, PETERS, and BECKFORD, Assistant STRANGMAN, Demonstrator KAZANJIAN. 544 hours.
- Anatomical Articulation, Mechanical Treatment of Fractured Jaws, Cleft Palates, and other Deformities. — Asst. Professor CROSS. 21 hours.
- Extracting and Anaesthesia. — Professor POTTER, Instructors FARRINGTON, SQUAREBRIGGS, STONE, MIDGLEY, GILPATRICK, and NORWOOD. 477 hours.
- Porcelain Inlays and Carving Teeth. — Instructors HADLEY and MOFFATT. 142 hours.
- Roentgenology. — Assistant CUMMINGS. 208 hours.
- Surgery, Surgical Pathology, and Oral Surgery. — Professor MONKS, 12 lectures and demonstrations; Professor MONKS, Instructor MINER, Assistant TAFT, clinics, 160 hours. Instructor BLAKE, 9 clinics at City Hospital.
- Syphilis. — Instructor C. MORTON SMITH. 6 lectures and clinics.
- Oral Hygiene. — Lecturer GEORGE H. WRIGHT. 15 lectures and clinics at Nose and Throat Department, Massachusetts General Hospital.
- Operative Dentistry, Seniors. — Professor POTTER. 32 hours.
- Operative Dentistry, Juniors. — Lecturer DILL. 32 hours.
- Operative Dentistry, Infirmary, Seniors. — Professor SMITH, Instructors LOVELAND, JEWELL, EDDY, BLAISDELL, FURFET, PAUL, STANLEY, ELLIOTT, and COOPER. 624 hours.
- Operative Dentistry, Infirmary, Juniors. — Lecturer DILL, Instructors LITTIG, WHITEHILL, PIKE, STEVENS, WHITCHURCH, COOPER, WYMAN, SPINNEY, CHUTE, LEAVITT, F. T. TAYLOR, Assistants O. S. SMITH and ESTES.

The work of the School is outlined in the following tables: —

OPERATIVE DEPARTMENT

No. of treatments of teeth and gums	1,888
“ “ “ pyorrhoea alveolaris	120
“ sets of teeth cleaned	1,211
“ fillings — gold	936
“ “ gutta percha	371
“ “ cement	1,365
“ “ amalgam	1,740
“ “ amalgam and cement	1,140
“ “ silicate	260
“ patients	3,199
“ operations	9,868

PROSTHETIC DEPARTMENT

SERVICE TO PATIENTS

No. of sets of artificial teeth	176
“ “ “ “ repaired	102
“ partial sets of artificial teeth	136

PRACTICE WORK

No. of specimen plates	254
----------------------------------	-----

ORTHODONTIA

SERVICE TO PATIENTS

No. of patients treated for irregularities of the teeth	36
“ appliances	99
“ models of regulating cases	68

PRACTICE WORK

No. of appliances for irregularities of the teeth	126
“ models for regulating cases	42

CROWN AND BRIDGE WORK

SERVICE TO PATIENTS

No. of crowns and caps	92
“ crowns repaired	22
“ pieces of bridge work	54
“ “ “ repaired	24

PRACTICE WORK

No. of crowns and caps	201
“ bridges	114
“ carved teeth models	14

INLAY WORK

SERVICE TO PATIENTS

No. of porcelain inlays and tips	36
“ gold inlays	58

PRACTICE WORK

No. of porcelain inlays	30
“ gold inlays	80

FRACTURED JAWS

SERVICE TO PATIENTS

No. of cases	29
“ appliances	29

PRACTICE WORK

No. of appliances	44
-----------------------------	----

ARTIFICIAL PALATES

SERVICE TO PATIENTS

No. of cleft palates	2
“ “ palate appliances	4

SURGICAL DEPARTMENT

No. of patients	570
“ cases of stomatitis	4
“ “ non-erupted teeth	6
“ “ syphilis	4
“ “ alveolar abscess	26
“ “ impacted lower third molars	12
“ “ tri-facial neuralgia	1
“ “ necrosis	6
“ “ fibroma	4
“ “ cysts	3
“ “ alveola sinus	6
“ “ chronic osteitis	1
“ “ imbedded roots with abscess	2
“ “ imbedded root involving antrum	1
“ “ amputation of root	5
“ “ maxillary sinusitis	7
“ “ cervical adenitis	2
“ “ mucus cyst of lip	1
“ “ acute pyorrhea	2
“ “ ranula	1
“ “ replantation	1
“ “ stricture of Stenson's duct	1
“ “ tubercular abscess	1
“ “ neuroma	2
“ “ sarcoma	2
“ “ carcinoma	1
“ “ fractured jaws	4
“ radiographs	208

SUMMARY

No. of operations in Prosthetic Department	801
“ “ Operative Department	9,067
“ “ Surgical Department	3,406
	<u>18,274</u>

An evening course was conducted from October 25 until March 14, open to graduates and practitioners of repute. The following subjects were offered:—

Porcelain Inlays. JOHN Q. BRYAN, D.D.S., Indiana Dental College, Indianapolis, Ind.

The Muscles of Facial Expression. GEORGE H. MONKS, M.D., Harvard Medical and Dental Schools.

- Anatomical Articulation, Correctable Impression, Cleft Palate and Fractured Jaws. HAROLD DEW. CROSS, D.M.D.
- Crown and Bridge. JULIUS F. HOVESTADT, D.M.D.
- Relation of Mastication to the Work of the Digestive Glands. WALTER B. CANNON, M.D., Harvard Medical School.
- Diseases of the Heart. FRANCIS W. PALFREY, M.D., Harvard Medical School.
- Inlay Technique. HENRY W. GILLETT, M.D., New York, N.Y.
- Syphilis. C. MORTON SMITH, M.D., Harvard Medical and Dental Schools.
- Sterilization. WILLIAM H. POTTER, D.M.D.
- Roentgen Rays. EARLE C. CUMMINGS, D.M.D.
- Orthodontia. CALVIN S. CASE, D.D.S., M.D., Chicago College of Dental Surgery, Chicago.
- Interstitial Gingivitis. EDWARD C. BRIGGS, D.M.D., M.D.
- Oral Surgery. LEROY M. S. MINER, D.M.D., M.D.
- Nitrous Oxide and Oxygen. CHARLES K. TETER, D.D.S., Cleveland, O.
- Laryngology. HARRIS P. MOSHER, M.D., Harvard Medical School.
- Oral and Nasal Hygiene. GEORGE H. WRIGHT, D.M.D., Harvard Medical and Dental Schools.
- Actinomycosis. FREDERICK T. LORD, M.D., Harvard Medical School.
- Orthodontia. ALFRED P. ROGERS, D.D.S.
- Trigeminal Neuralgia. EDWARD W. TAYLOR, M.D., Harvard Medical and Dental Schools.
- Orthodontia. LAWRENCE W. BAKER, D.M.D., and HORACE L. HOWE, D.M.D.
- Removable Bridge Work. RALPH B. RITZ, D.D.S., New York, N.Y.

A summer course in Prosthesis was conducted by Assistant Professor Harold DeW. Cross which was attended by eleven students.

Preliminary steps were taken during the year to rearrange the courses of the first year which are given in the Medical School by teachers from the Medical staff. After much discussion on the part of the Administrative Boards of the Medical and Dental Schools a committee of five was appointed by the President to take into consideration the merits of the proposed changes made by the Medical men. The Committee was made up as follows: Dean Smith (chairman), Drs. Potter, Minot, Warren, and Folin. The result of the deliberation of the Committee led to a rearrangement of the courses so that the Dental students, who are now increasing in numbers, will be able to have the necessary laboratories to themselves under special teachers.

The following arrangement was adopted:—

Physiological and Dental Chemistry, Histology and Embryology, including the dissection of the animal, during the first half-year; Anatomy, including the dissection of the human, and Physiology, during the second half-year.

This plan, of course, is a radical innovation in the method of teaching these fundamental branches of medicine, but is looked upon with favor by many who feel that the Dental student having had little or no biological work in his preliminary training will be better prepared to benefit by the courses in Anatomy and Physiology by being first trained in Histology and Embryology, which includes the dissection of the animal.

The Dean was appointed as delegate to the meeting of the Dental Faculties Association of American Universities, held in Iowa City in March. The meeting was attended by the Deans of the Dental Departments of the University of California, State University of Iowa, University of Michigan, University of Minnesota, University of Pennsylvania, and Harvard University.

One of the important results of this meeting was the agreement entered into by the members of the Association to adopt the Harvard standard of entrance requirements, namely, a four years' high school training which must include Physics and Chemistry which were formerly taught during the first year of the Dental course.

The Deans of the schools were most hospitably entertained by President MacLean of the University of Iowa, and by the Faculty of the University.

Dr. Robert T. Moffatt, a graduate of our School in the Class of 1895, has placed \$500 at the disposal of the Administrative Board, \$100 to be given each year for five years to a needy student or students, preferably seniors or juniors, who, in the opinion of the Board, are most worthy. A vote of thanks was extended to Dr. Moffatt for his generous gift.

The Chemistry Department, under the charge of Mr. H. Carlton Smith, has continued the investigation of oxydizing enzymes, and the study of saliva in its relation to disease. This work is new and has been carried on in connection with cases from the Boston Dispensary.

Dr. George H. Wright read a paper before the National Dental Association in Cleveland, Ohio, on "A New Instrument for Comparative Measurements demonstrating Changes in Nasal Fossae when Readjusting the Maxillary Arch." He lectured be-

fore the physicians of the Brookline Medical Society on the "Teeth and Their Relation to Functional Disturbances." He has also been making a study of malformations of the orbit coincident with maxillary irregularities.

Professor William H. Potter delivered seven lectures on Oral Hygiene in New England, and one before the Institute of Stomatology, New York. August 7, he spoke upon the "Condition of Oral Hygiene in the United States" before the International Commission for Dental Hygiene, in London, England.

The Library has been enriched by the bequest of the late Dr. Luther D. Shepard of his dental library, and by the gift of valuable books by Dr. George H. Monks.

In recognition of the very great interest taken by the late Dr. Dwight M. Clapp in the development of the X Ray in connection with dentistry, and for his valuable service to the School as teacher and member of the Administrative Board, the Board voted to give his name to the X Ray department.

At the request of the International Hygiene Committee the School sent an exhibit to the Hygiene Exhibit in Dresden, Germany, which was open from May until October, the essential features of which were:—

1. Photographic reproductions of experimental work done by Assistant Professor BAKER upon animals, showing changes in the bony development of the head due to a loss of teeth.
2. Salivary analysis exhibit (methods and apparatus).
3. Formalin-gelatin mounts of carious teeth.
4. Papers (printed) upon school dental examinations, relation of erupting teeth and enlarged tonsils.

In March, 1911, Dr. Miner read a paper before the American Academy of Dental Science on "Clinical Studies from Cases in Oral Surgery." This paper was the result of studies of cases from the surgical clinic of the Harvard Dental School, the dental clinic of the Massachusetts General Hospital, and from his private practice.

Dr. Miner has spent much time during the year in the study of certain tumors of the alveolar process generally known as epulis. He has also made investigations in the Bacteriology of Pyorrhoea, and in the vaccine treatment of the cure of this disease. He has further investigated into the pathological conditions and treatment of ununited fractures of the jaw. The result of his findings will soon be published.

The Committee on the raising of funds for the school did a great deal of work during the past winter and succeeded in obtaining a few thousand dollars for the Endowment Fund. The task of raising a suitable endowment for the School is a difficult one. The efforts of the Committee, however, will be continued with the hope that the School will soon be placed on a good financial basis and thereby be better able to carry on its work of education and charity.

EUGENE H. SMITH, *Dean*.

THE LIBRARY

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — As Director of the University Library and Chairman of the Council of the College Library, I beg to submit my report covering the year from July 1, 1910, to June 30, 1911.

The past year has not been an eventful one for the College Library. Owing to the shortening of the previous fiscal term a heavy charge on unpaid bills was carried over into the next, considerably reducing our immediate resources for the purchase of books. The Council accordingly saw itself obliged to cut off all unexpended appropriations except those from restricted funds. This has borne hard on several departments. Fortunately the situation was helped out by generous gifts from several quarters, so that the total amount spent was almost exactly that of the average for the last five years. We have also come into possession of an unusual number of new funds from gifts or bequests, which will serve as a much needed compensation for the loss of revenue due to the transfer of a portion of the Pierce fund from book buying to administrative purposes. The most notable gift of books that we have received has been the Joan of Arc collection of the late Francis C. Lowell, which we shall be able to continue and increase, thanks to the fund established in his memory. It should be remembered that all our collections, with the exception of a very few specially provided for, can be enriched only through the liberality of friends of Harvard. The ordinary resources of the Library suffice at best to meet somewhat inadequately the needs of the various departments for the current scholarly and scientific literature on their subjects. Yet it is the special collections that constitute the strength and glory of a great library, and we must never lose a chance of adding to those we possess, no matter how inadequate may be our present accommodation for them.

In my report of last year I pointed out four administrative tasks which the Library must attend to without delay, — namely, the catching up of our back work in cataloguing, the making of new classifications, reforms in the subject catalogue, and the change from our small size catalogue cards to standard ones.

I am glad to be able to report progress in all of these directions, though in some of them the work has been that of preparation rather than of actual advance. We have at least ceased to add to our back work by putting certain cards into the official catalogue only, where they are useless to the public. Henceforth our accessions will be recorded as promptly as possible in the public catalogues; we have begun to make up arrears and expect to proceed much faster with this in the future. Secondly, we have classified on the shelves some thirty-five thousand volumes, previously unarranged or in a defective arrangement. Thirdly, we have made improvements in our subject catalogue and shall continue to do so from year to year, but without attempting any fundamental changes which, desirable or not, would be impossible under our present financial conditions. At the same time we have carefully considered, modified, and, I believe, much improved our rules as to subject cataloguing. Finally, since January 31, 1911, we have made out only cards of standard size, although for a while this necessitated a special catalogue case to hold them. In connection with this whole change many preparations had to be made, especially with regard to the installation last summer of new catalogue cases with 2,424 trays into which had to be placed about one million and a half cards. For instance, the mere preliminary boring of holes in the cards took nearly three months.

There is nothing now for me to add on the subject of our supreme need, a new building. Each year we waste more and more money, and we are put to and put others to more and more inconvenience by storing fresh thousands of volumes in some stray cellar and by continually shifting thousands in Gore Hall in order to obtain a little more space where most needed. It is now getting common to see in our book stacks volumes lying on tables or on the floors of the passageways for weeks at a time owing to the fact that it means hours and sometimes days of work in book moving before the necessary room can be created in a given spot. A preliminary committee of architects has prepared an extremely interesting tentative ground plan for a new building. This has been accepted by the Overseers, but until the necessary funds are forthcoming it represents only one more pious wish. In the meanwhile the danger of a fire like that which recently destroyed the State Library of New York is a fact we can do nothing to meet, and we dread even to think of. The consequences of such a catastrophe to the whole future of the University need no pointing out.

The Departmental Libraries are at least better housed and their growth continues to be satisfactory. The library of the Divinity School is being moved over to the new building of the Andover Theological Seminary, to be gradually merged with the collection there. A new wing is to be added to the Gray Herbarium which will give it needed additional space for its valuable possessions. At the present time, the special reference libraries, being merely parts of the College one, though not located in Gore Hall, make their purchases through the central ordering department, but the departmental libraries, with the exception of the Gray Herbarium, buy and catalogue their own new books. Although this is probably not the most economical system, and leads to duplication, it is necessary as we are situated. Many of the departmental libraries are growing faster relatively than is the College Library, which is now totally incapable of handling their work for them, and they prefer to do it for themselves even at greater cost. The existing arrangement has distinct advantages. It is more flexible and may accomplish more, as the departmental libraries have their own specially trained staffs, besides which their professors take a keen personal interest in their growth and give them invaluable aid. The vote of the Corporation of January 30, 1911, requiring these libraries in future to send to Gore Hall cards for their acquisitions, will in time build up there a central catalogue indicating the resources of all parts of the Harvard University Library. Unfortunately it will be many years before we can hope to make up deficiencies due to our having been unable to keep a complete record in the past.

The question of the desirability of transferring books from the custody of one of our libraries to that of another is of growing importance. At first sight it would seem that as officially "the University Library consists of all the collections of books in the possession of the University," those in any portion of it should be placed where they will be most useful. This could be insisted upon if all of them had been paid for from a common fund. In point of fact, however, the departmental libraries (and even most of the special reference ones) have their own budgets and resources and not unnaturally regard their volumes as their personal property. But even admitting this claim, we may wonder whether the different parts of the University Library might not do more to help one another than they sometimes have. Should they not, for instance, ordinarily be willing to present their duplicates to one another rather than sell them to outsiders?

Should they not also consent to hand over to each other books which, though not duplicates, are not likely to be needed by them and may be useful elsewhere, reserving to themselves in each case the right of decision. As the College Library is a general collection, there has been an increasing demand on it from the departmental and the special libraries, and thousands of volumes have been transferred to them. The decision is often difficult to make in individual instances, and is complicated by the fact that few of the other libraries are willing to be or can be as liberal in lending out their books as Gore Hall; therefore a transfer of books to them means putting greater restrictions on the use of those books. Nevertheless, I believe that this process should continue and that a number of works now in Gore Hall could wisely be sent elsewhere, but if this is true it is equally true that in certain other cases, even if so far they have not been numerous, books from the departmental libraries should be turned over to the central one, or to each other. It matters little that such exchanges will be unequal, that for instance usually Gore Hall, as in the past, will give more than it will receive. A broad liberal policy in these matters is the only wise one. The component parts of the Library of Harvard University should not assume an attitude of bargaining with one another but should be glad to be as generous as possible without injustice to themselves. Their combined resources and their utmost mutual aid will be none too great in view of the competition that the Harvard Library, like the rest of Harvard University, is meeting in other institutions of this country.

ARCHIBALD CARY COOLIDGE.

APPENDIX TO THE LIBRARY REPORT

I

ACCESSIONS

The accessions to the libraries of the University for the year, and the present extent of each are shown in the following table:—

Accessions	Volumes added	Present extent in	
		Volumes	Pamphlets
College Library :—			
Gore Hall Collections	23,231	564,088	392,396
Thirty-two Special Reference Libraries . . .	4,349	61,456	..
Law School	6,260	126,051	14,256
Divinity School	636	38,794	11,074
Medical School	1,552	17,780	36,000
Dental School	46	1,675	12,000
Bussey Institution	68	3,818	11,000
Museum of Zoölogy	1,095	47,952	44,369
Peabody Museum	277	4,172	4,008
Astronomical Observatory	297	13,508	30,000
Gray Herbarium	657	12,784	10,017
Arnold Arboretum	2,222	24,747	6,659
Total	40,690		
Deduct, transfers between Gore Hall and Department Libraries	305		
Totals	40,885	916,275	571,774
Andover Theological Seminary . . . . .	..	64,000	37,000
Total number of volumes and pamphlets . .		1,589,049	..

The additions to the Gore Hall collection alone for the last five years have been as follows:—

ADDITIONS TO GORE HALL	1906-07	1907-08	1908-09	1909-10 11 mo.	1910-11
Volumes by purchase or exchange .	7,520	8,765	9,759	8,577	9,939
Do. by binding serials	1,478	1,699	1,841	1,924	2,382
Do. by binding pamphlets	852	1,099	1,122	974	1,315
Do. by gift	4,852	7,153	17,939	9,141	9,547
Total volumes added	14,702	18,716	30,661	20,616	23,183
Maps in sheets	512	699	1,131	525	555
Pamphlets by purchase or exchange	1,899	2,010	1,820	3,051	2,044
Do. by gift	14,128	14,872	19,611	17,348	21,848
Total gifts (vols. and pams.) . . .	18,980	22,025	37,450	26,489	31,395

INCOME AND EXPENDITURE FOR BOOKS

The following table shows the income of the book-funds, receipts from other sources for the purchase of books, and expenditures for books during the last six years:—

INCOME AND EXPENDITURE	1906-06	1906-07	1907-08	1908-09	1909-10 11 mos.	1910-11
From book funds, —						
Balance from previous year .	\$4,781	*\$5,140	\$5,726	\$5,723	\$5,029	\$2,163
Income of the year	19,063	†20,259	19,778	20,917	19,111	21,426
Total available	23,844	25,399	25,499	26,640	24,140	23,589
Spent for books	19,324	19,673	19,776	21,611	21,977	19,332
Balance to next year	4,520	5,726	5,723	5,029	2,163	4,257
Special gifts, sales, etc. —						
Balance from previous year .	2,814	4,279	3,802	3,321	4,860	‡4,241
Received during the year . .	9,484	10,115	5,351	7,246	11,948	11,521
Total available	12,298	14,394	9,153	10,567	16,808	15,762
Spent for books	8,019	10,592	5,832	5,707	8,567	11,425
Balance to next year	4,279	3,802	3,321	4,860	8,241	4,337
Total spent for books, —						
College Library	\$27,343	\$30,265	\$25,608	\$27,318	\$30,544	\$30,757
Dep't and Spec. Ref. Libraries (orders through Coll. Lib.)	9,357	7,642	5,914	7,436	8,339	9,239
Total	\$36,700	\$37,907	\$31,522	\$34,754	\$38,883	\$39,996

* Includes \$620 accumulated income of the Boott Fund, not previously reported.

† Includes a special appropriation of \$1000.

‡ The balance of last year is diminished by the transfer of \$4,000 to the Coolidge-Hay Fund.

SPECIAL REFERENCE LIBRARIES

The present extent of these libraries is as follows:—

SPECIAL REFERENCE LIBRARIES	Perma- nent	On Deposit	Totals
1. Chemical Lab. <i>Boylston Hall</i>	3,088	1,230	4,318
2. Physical Lab. <i>Jefferson Phys. Lab.</i>	689	19	708
3. Botanical Lab. <i>University Museum</i>	1,279	120	1,399
4. Geological Lab. <i>Do.</i>	236	..	236
5. Mineralogical Lab. <i>Do.</i>	873	212	1,085
6. Phys. Geography Lab. <i>Do.</i>	251	180	431
7. Zoological Lab. <i>Do.</i>	401	..	401
8. Plant Physiology Laboratory. <i>Botanic Garden</i> .	133	..	133
9. Astronomical Lab.	71	..	71
10. Statistical Lab. <i>Dane Hall</i>	247	..	247
11. Physiological Lab. <i>Lawrence Hall</i>	64	..	64
12. Classics. <i>Harvard Hall 3</i>	4,777	148	4,925
13. History. <i>Harvard Hall R. R.</i>	5,869	39	5,908
14. Economics. <i>Do.</i>	1,661	34	1,695
15. Social Ethics. <i>Emerson Hall.</i>	3,300	..	3,300
16. Philosophy (Robbins Library and Psychol. Lab.). <i>Emerson Hall</i>	4,071	44	4,115
17. Child Memorial (English). <i>Warren House</i> . .	5,256	90	5,346
18. Lowell Memorial (Romance). <i>Do.</i> . .	1,632	6	1,638
19. German. <i>Do.</i> . .	1,558	..	1,558
20. French. <i>Do.</i> . .	2,614	..	2,614
21. Sanskrit. <i>Do.</i> . .	1,027	31	1,058
22. Semitic. <i>Semitic Museum</i>	1,844	24	1,868
23. Mathematics. <i>Sever 22</i>	965	69	1,034
24. Mining and Metallurgy. <i>Rotch Laboratory</i> . .	400	71	471
25. Engineering. <i>Pierce Hall</i>	7,508	197	7,705
26. Music. <i>Holden Chapel</i>	1,048	..	1,048
27. Education. <i>Lawrence Hall</i>	6,433	..	6,433
28. Business. <i>Do.</i>	212	1,247	1,459
29. Fine Arts (incl. Gray and Randall Coll.). <i>Fogg</i> <i>Museum</i>	1,179	13	1,192
30. Architecture. <i>Robinson Hall</i>	2,084	16	2,100
31. Preachers' Library. <i>Wadsworth House</i>	186	..	186
32. Phillips Brooks House Library	500	..	500
Totals	61,456	3,790	65,246

SHELF DEPARTMENT

During the year the following groups were permanently classified:—

Church History	12,485	volumes
Forestry	497	"
General Geography	2,129	"
Heraldry	120	"
International Law	1,585	"
British History	18,158	"
Total	34,924	"

II

FROM THE REPORT OF THE LIBRARIAN

The diminution in the Library's income for the purchase of books, caused by the small balance carried forward from the previous year and by the application of the entire income of the Pierce Fund to administrative expenses, was fortunately made up by the receipt of an unusually large number of gifts and by the establishment of several new funds (aggregating over \$75,000) the income from which will henceforth be continually available for the increase of the Library in special fields.

The new funds received are the following:—

Coolidge and Hay Fund, \$4,500. From Professor A. C. Coolidge and Mr. Clarence Leonard Hay, '08, for the purchase of books relating to South America. This fund insures the regular increase of our South American collection, of which the chief foundation was the library of Luis Montt, of Santiago de Chile, received two years ago as a gift from Messrs. Coolidge and Hay.

Cutting Fund, \$12,500. A legacy from W. Bayard Cutting, Jr., 1900, a constant and generous friend of the Library, the income to be used for the purchase of books on modern European history and the history of the countries of North Africa, preference being given to books on the history of France, Switzerland, or Italy, and to the history of Morocco, Algiers, or Egypt. In addition to the income of this book-fund, one-half of the income of the Bayard Cutting Fellowship Fund of \$25,000, in any year when the Fellowship is not awarded, is to be used for the purchase of books of permanent value, preferably in French or Italian literature.

Gross Fund, \$1,590. Established in memory of the late Charles Gross, Professor of History, by his friends and pupils, the income to be used for the purchase of books on English history and institutions.

Lodge-Stickney Fund, \$3,125. Established as a memorial of George Cabot Lodge and Joseph Trumbull Stickney, the income to be used to purchase rare and choice works of English and French Poetry.

Francis Cabot Lowell Fund, \$10,000. Given by Mrs. Lowell in memory of her husband, Judge Lowell, a member of the Corporation, the income to be used to supplement his collection of works on Joan of Arc (bequeathed by him to the College Library) by the purchase of books of historical value on countries and periods more or less closely related thereto.

Treat Fund, \$41,000. Legacy of John Harvey Treat, of the Class of 1862, being the residue of his estate. By the terms of Mr. Treat's will, the income is "to be used for the benefit of the Library for the purchase of books relating to the Church of England and other churches in communion with her, the Roman and Greek Churches, and the Episcopal Church in the United States of America, especially as regards ritual matters of the same general character as the collection presented [by Mr. Treat] in 1888; also books relating to Christian archaeology. If the funds are more than sufficient for the purpose designated, they may be used for other departments at the discretion of the Librarian." Mr. Treat's previous gifts for the same purpose have been chronicled in almost every one of the Librarian's reports for many years. These have been mainly devoted to the building up of a collection of works on the Roman Catacombs, in which subject Mr. Treat was especially interested.

Twentieth Massachusetts Regiment Fund, \$600, to accumulate until it amounts to \$1,000. In December, 1910, the University received from Col. Charles L. Peirson, S.B. '53, of Boston, the sum of \$861.50, representing the balance of the fund raised for a memorial to the Twentieth Massachusetts Regiment of Volunteer Infantry, which served throughout the War of 1861-65. The bulk of the original fund was used in placing one of the St. Gaudens lions on the stairway of the Boston Public Library and in establishing in that library a fund of \$5,000 for the purchase of books of a military or patriotic character. The income of the College Library fund, when it has reached its designated limit, is to be used for buying books of a similar character, those on the American Civil War having preference. The balance of the gift may be spent from time to time in a similar way as needed.

Welsh Fund, \$3,000. Established as a memorial of Julian Palmer Welsh, of Philadelphia, of the Class of 1897, and given by a number of his friends. The income is to be spent in buying books in English and American literature. An engraved bookplate, by Mr. Bruce Rogers, has been provided.

The establishment of the Craig Prize in Dramatic Composition will provide a regular income for the purchase of books on the history of the English stage so long as the prize is awarded, since one-half of the prize of \$250 is to be given to the College Library for this purpose.

An annual gift of \$1,000, in memory of Charles Elliott Perkins, of the Class of 1904, is for books on the history of the Western states. The donor remains anonymous. With these successive gifts, it may be expected that an extremely valuable collection of Western history will be built up.

Other gifts received in continuation of former ones, which have been some annual and some occasional, are as follows: From Mrs. R. L. Adlercron, of London, formerly Miss Hester Bancroft, \$600 for books on Japan; from Thomas Barbour, '06, of Brookline, \$35 for books on Oceania; from Harold J. Coolidge, '92, of Boston, \$50 for books on China; from the Dante Society of Cambridge, \$50 for books on Dante; from Ellis L. Dresel, '87, of Boston, \$50 for books on German drama; from Professor G. L. Kittredge, '82, of Cambridge, \$100 for books on the history

of witchcraft; from John S. Lawrence, '01, of Boston, \$10 for books on the biography of successful men (received after the close of the financial year); from James Loeb, '88, of New York, \$100 for labor periodicals; from Edwin S. Mullins, '93, of Hyannisport, \$50 for folklore; from Walter W. Naumburg, '89, of New York, \$200 for books on Shakespeare; from William Phillips, '00, of the American Embassy in London, \$100 for books on London (received just after the close of the financial year); from Horace B. Stanton, '00, of Boston, \$25 for books on Molière.

Mr. Alexander Cochrane, of Boston, has supplemented his gift of some years ago by another gift of \$1,000, of which \$750 is for English Literature and \$250 for Scotch History and Literature.

Professor A. C. Coolidge's gifts for books have amounted to \$2,137, and have been devoted principally to works on German and French History, on Morocco, and on the Ottoman Empire.

Other welcome gifts have been received as follows: From Harold W. Bell, '07, of Cambridge, \$137 for a set of the "Numismatic Chronicle"; from James F. Curtis, '99, of Boston, \$50 for books on the Western states; from Mr. William B. Cutting, of New York, to fulfil the expressed intentions of his son, \$150 for books on Napoleon, Florence, and Switzerland; from James L. Derby, '08, of New York, \$25 for books on the Philippines; from Henry Stephens, 3d, '05, formerly of Waters, Michigan, now living in Zalaegerszeg, Hungary, \$550 for the purchase of the extremely rare set of the "Codex diplomaticus Hungariae" (40 volumes); from Horace E. Ware, '67, of Boston, \$100 for books on Comparative Philology.

Gifts for the purchase of books in English Literature have been received from Robert Bacon, '80, of New York, \$100; Henry W. Cunningham, '82, of Boston, \$100; E. P. Merritt, '82, of Boston, \$100; James A. Stillman, '96, of New York, \$100; George Wigglesworth, '74, of Boston, \$100; Lucius Wilmerding, '01, of New York, \$150. To these sums the Department of English added \$132 and an anonymous giver \$53. Much of this money would have been spent at the Hoe sale if the prices given had not been exorbitant. A large part of these gifts has been actually applied with great advantage to the purchase of original issues of English poetry of the seventeenth and eighteenth centuries, in folio form, offered for sale by Pickering and Chatto in London.

Unrestricted gifts for the purchase of books were received from William Endicott, Jr., '87, \$1,500; Godfrey Morse, '70, of Boston, \$50; and Evan Randolph, '03, of Philadelphia, \$100.

An anonymous gift of \$500 for the purchase of books on Fine Arts, and another anonymous gift of \$25 for the purchase of books on Oceanic Linguistics, were likewise received. All these gifts, the number and variety of which is unusual, made it possible to maintain the normal increase of the Library in most departments and to add particularly valuable collections in certain fields.

The total number of volumes received by gift, as distinguished from those bought with money given, was about the same as usual, in spite of the fact that no very large collections were received from any individual donor. The most notable gift of the year was the bequest from Judge Francis C. Lowell of his books relating to Joan of Arc and French

History of the fifteenth century, a collection which has particular value because of the discriminating care with which it was formed. It numbers over five hundred volumes and pamphlets, but sixty-five of the volumes are made up by binding many pamphlets together. The memorial fund given by Mrs. Lowell insures the constant addition to the collection of whatever may be had that is valuable.

From the Spanish Government we received 382 volumes of the "Actas" of the Castilian Cortes, 1559-1598, and of the Spanish Cortes from 1809 to date.

From the French Government came 157 volumes of the "Annales du Sénat," in continuance of previous gifts of the same set.

The governments of Prussia, Austria, and of many of the Prussian provinces have continued to send us their current official publications, making a collection of great historical and statistical value.

The books received in July, 1910, from the estates of Professor J. B. Greenough and of Professor Charles Gross were mentioned in last year's report. The family of Professor F. J. Child have added about sixty volumes and a number of pamphlets to their former gifts from Professor Child's library. From the library of Professor A. S. Hill, we have received thirty volumes; and from that of Professor C. L. Smith, 678 volumes, 49 pamphlets, and 40 serials. From the Estate of Robert Treat Paine we received 63 volumes. Mr. Samuel S. Shaw, '53, of Boston, has sent us from time to time a number of interesting letters and papers from his father's correspondence, illustrating undergraduate life many years ago. Dr. Osler, of Oxford University, had the kindness to send us photographs of early Commencement Theses and Quaestiones which he had found in the Hunterian Museum in Glasgow. The Commencement Theses are for the years 1643, 1646, 1647, 1653, and 1678. Those for 1643, 1647, and 1678 had been known hitherto only from copies preserved in the collections of the Massachusetts Historical Society; the others are probably unique, and all of them were lacking in the Harvard collection.

From the Netherland Bible Society have been received nearly a hundred volumes of translations of the Bible and its parts into African and East Indian languages.

One of the interesting purchases of the year was a collection of pamphlet and broadside material relating to the French Revolution and the Commune. This has been supplemented by a gift from an anonymous donor of ninety-seven broadside proclamations relating to the French Revolution.

Mr. Daniel B. Fearing, of Newport, has continued to send, for the Morgan collection of Persius, rare and valuable editions of that poet hitherto wanting in the Morgan collection.

Such are a few of the interesting or valuable gifts received in the course of the year. Any detailed enumeration of them is impossible within the limits of this report, but the thanks of the College are transmitted to each donor as his gift is received, and at this time only a general expression of gratitude is possible.

APPLETON CHAPEL AND PHILLIPS BROOKS HOUSE

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—I alluded in my last report to the change of hour of the Sunday service at Appleton Chapel, which had taken place after the Christmas recess in the previous year, 1909-10. I was able to report as to the effect of that change for the period only from January to June, 1910. On twenty-four Sundays during that period the average attendance had been 339, the average number of students being 168. The Chapel Committee appointed by the Phillips Brooks House have furnished the following table for the report of the Association, of which I avail myself:

	1908-09	1909-10 ¹	1910-11
Student attendance, average	146	151	244
Student attendance, maximum	450	459	700
Student attendance, minimum	40	50	104
Student attendance, number of Sundays below 100	16	9	0
Student attendance, number of Sundays 200 or over	9	8	20
Student attendance, percentage of total attendance	34.2	47.6	47.5
Total attendance, average	426	317	513

It had been the judgment of the Board of Preachers that the first effect of the change of hour might easily be a falling off in the total number of those in attendance, since the proportion of residents of Cambridge availing themselves of the Chapel services would certainly be diminished. The figures above given show the justice of that judgment, though the averages for the second half-year are better than for the first. But the year just closed shows the increase which was hoped. That increase is entirely in the number of students and of members of the Faculty and their families. Representatives of the churches in the immediate vicinity of the University assure the Board of Preachers that the resort of students to these churches has not been seriously diminished. At the same time the Chapel service has been given the central place in the life of the University which is fitting. Obviously, also, a need in the life of certain members of the Faculty and of their families is being filled. Up to a certain point an illustration is being given of the possibility of an interdenomina-

¹ Service changed to morning hour January 1, 1910.

tional church. At the request of many who have made the Chapel their church home it has been arranged that the Sunday services shall be continued during the periods of recess, excepting, of course, the long summer vacation. In limited degree the request has been made on behalf of certain families that permanent sittings be assigned to them. It has been easy to accede to this request. On the other hand, it should be said that there are many who prefer to ask for no restriction of this sort.

The average number of students and instructors in attendance upon the daily service of morning prayers during the year 1910-11 was, for two hundred and ten services, exactly 100. The corresponding figure the previous year was 90.

If it is permissible to speak of the greatest need of the Chapel at this moment, that is certainly the need of a new organ.

The Phillips Brooks House Association and its constituent societies reported June 1, 1911, membership as follows: —

Phillips Brooks House Association (direct)	40
Harvard University Christian Association	220
St. Paul's Society	200
St. Paul's Catholic Club	150
Graduate Schools' Christian Association	50
Law School Society	20
Harvard Divinity Club	55
	<hr/>
	735

of whom 300 are reckoned as paying members.

The Social Service Committee reported men at work under its direct appointment and supervision as follows: —

Teaching (Sunday School work not included)	147
Boys' Clubs	123
Home Libraries	11
Miscellaneous (reading to the blind, tutoring, juvenile court work, friendly visiting, etc.)	11
	<hr/>
	292

This service was rendered in thirty institutions.

The Committee having Charge of Bible Study reported men engaged in Bible Study or in the consideration of religious problems as follows: —

Classes	Number	Sessions	Enrolment	Average Attendance
Normal (for leaders)	3	5	19	15
Led by Professors	7	8	201	104
Led by Students	15	7	99	78
	<hr/>	<hr/>	<hr/>	<hr/>
	25	20	319	197

These figures are taken from the report of Mr. Joseph S. Davis, '08, the retiring Secretary, to whom much of the success of the work at the House in the past two years is due.

The Secretary for this year is Mr. Arthur Beane, who was associated with Mr. Davis last year as Social Service Secretary and who is now giving full time to the work of the Phillips Brooks House. The Social Service secretaryship is now held by Mr. Eliot Dunlap Smith, '12. A pamphlet on "Social Service," published by Mr. Smith in September, 1911, with the report of Mr. Davis above referred to, gives information in detail as to the voluntary undertakings, religious and philanthropic, which have their centre at the Brooks House. The magnitude and variety of that work must surely win the attention and gain the sympathy and coöperation of the friends of the University.

Besides the University Teas and the College Teas, the regular meetings of the Society of Harvard Dames have been held at the Phillips Brooks House. This Society is designed to bring together the women connected with the families of students in the various departments of the University temporarily resident in Cambridge. The meetings of several learned societies have been held at the House in the course of the year and the House is always placed at the disposal of women in attendance at the Summer School.

EDWARD CALDWELL MOORE.

THE GRAY HERBARIUM

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — During the academic year 1910–11 the regularly employed staff of the Gray Herbarium has consisted of the Curator (Asa Gray Professor of Systematic Botany), an Assistant Professor of Botany, a collector, a librarian, an assistant engaged partly in bibliographical work and partly in the distribution of specimens, and an assistant employed chiefly in the mounting of specimens. The following persons have also been employed during portions of the year as supplementary aids: Miss H. E. Day, in bibliographical indexing; Messrs. C. A. Weatherby and A. W. Cheever, in determinative work as well as in the sorting and distribution of specimens; Miss June Adkinson, in sorting and labelling; and Mr. Joseph Kittredge, Jr., as assistant in field work.

By the death of Cyrus Guernsey Pringle, May 25, 1911, the Herbarium lost a skilled and discriminating collector. For nearly thirty years he had been connected with the establishment, — a position at first depending upon informal agreements with Dr. Gray and Dr. Watson, but in later years confirmed by Corporation appointment. During this period he made annual journeys of exploration to the wilder portions of the Southwestern and Pacific States and especially to Mexico. Combining in a highly exceptional manner the close observation and exact methods of the scientist with the energy and courage of a tireless and intrepid explorer, he attained well-merited distinction in his profession and leaves a long and enviable record of valuable discoveries and arduous work well done.

The more noteworthy collections of plants received during the past year have been as follows: I. *By gift, in exchange, or for identification*: from the United States National Museum, 1,831 plants, chiefly from the western and northwestern United States; from the New York Botanical Garden, 250 plants of Utah and 439 plants of Cuba and Jamaica; from the Arnold Arboretum, 322 herbaceous plants from Korea and Manchuria; from Mr. W. C. Lane, his private herbarium, consisting of 541 plants, chiefly from New England; from the Geological Survey Department of Canada, through Messrs. John and James M.

Macoun, 115 plants, chiefly from the Hudson Bay region; from Miss Grace Gilbert, formerly of Cambridge, her private herbarium, consisting of 1135 mounted plants; from Mr. E. B. Bartram, 321 plants, mostly from Pennsylvania and the pine barrens of New Jersey; from the United States Department of Agriculture, 77 plants of Turkestan; from Mr. C. C. Deam, 65 plants of Guatemala, and from Mr. W. S. Cooper, 153 plants of Isle Royale.

II. *Acquired by purchase*: from Mr. L. A. Goodding, 577 plants of Arizona; from Mr. T. S. Brandegee, 489 plants of southern central Mexico, collected by Mr. C. A. Purpus, many of them species of special rarity and interest; from Mr. W. H. Blanchard, 153 critically identified specimens of the difficult genus *Rubus*; from Mr. J. E. Dinsmore, 100 plants of Palestine; from Mr. C. R. Orcutt, 786 plants of Mexico; from Mr. J. C. Blumer, 252 plants of Arizona; from Mr. Max Koch, 242 plants of Australia; from the late Dr. Edward Palmer, 452 plants of northeastern Mexico, a noteworthy collection, the last to be made by this veteran explorer of long and distinguished record; from Dr. Ezra Brainerd, 181 specimens of North American violets, selected and prepared with special care to illustrate critical studies in this difficult group; from Miss Alice Eastwood, 170 plants of Colorado; from Mrs. C. F. Wheeler, 3,636 specimens chiefly of the genus *Carex* from the herbarium of the late C. F. Wheeler of the Department of Agriculture; from Mr. Karl Fiebrig, 845 plants of Paraguay and 301 plants of Bolivia; from Professor A. A. Heller, 320 plants of Utah, Nevada, Montana, and Oregon; from Mr. B. F. Bush, 281 plants of Missouri; from dealers: Fiori's *Flora Italica Exsiccata*, centuries 13-14; Baenitz's *Herbarium Americanum*, issues 17-22; also 250 plants of Brazil collected by E. M. Reineck and 152 plants of New Caledonia collected by R. Schlechter. III. *Collected by members of the staff*: 7,570 plants of Newfoundland and Labrador, secured by Professor Fernald and assistants.

The entire number of specimens received from all sources has been 20,552. The number of sheets of mounted specimens added to the organized portion of the Gray Herbarium has been 16,457, the largest recorded annual addition, bringing the whole number of sheets in the herbarium to 467,581. To the laboratory collection, used in instruction, there have been added 536 sheets of illustrative material.

To the library of the Gray Herbarium there have been added 657 volumes and 449 pamphlets. On June 30th, 1911, the library contained 12,786 volumes and 10,015 pamphlets. There have

been four issues of the Card-index of New Genera and Species of American Plants, together including 9,209 cards and bringing the total number of cards in the index to 92,705.

During the summer of 1910, Professor Fernald, accompanied by Professor Karl M. Wiegand of Wellesley College (who gave gratuitously his effective and valued coöperation), made a very successful exploring expedition to western Newfoundland and the portions of Quebec and Labrador adjacent to the Straits of Belle Isle. They were aided by Mr. Joseph Kittredge, Jr., and accompanied by Mr. Alfred V. Kidder from the Peabody Museum of Harvard University. The territory traversed had for the most part never been explored by trained botanists and yielded a large number of highly interesting plants giving new and important data regarding the relations of vegetation to the underlying rock-strata and furnishing much of the information which has since been published by Professor Fernald in evidence of a post-glacial land connection between Newfoundland and the North American Continent. More than 7500 specimens of plants were collected, which greatly amplify botanical knowledge of the regions visited.

During the year notable progress has been made toward a safe housing and adequate equipment for the Herbarium. The Gray residence has been removed in accordance with an agreement mentioned in the preceding report, and the Herbarium is thereby relieved of a considerable fire-menace. A quantity of further steel equipment has been installed, chiefly in the Kidder Wing, including 32 new herbarium cases with a joint capacity of some 80,000 sheets. Finally, two patrons have with great generosity subscribed the sums needed to effect important changes in the building. One of these gifts, amounting to \$25,000, from a donor who wishes to be anonymous, is to be used to rebuild, extend, and refurnish the library. The other gift was from Mr. George Robert White of Boston, for many years a member of the Visiting Committee, and will be devoted to the rebuilding, enlargement, and complete re-equipment of the laboratories lying between the main portion of the Herbarium and the Conservatories. For these purposes Mr. White has contributed the generous sum of \$31,500, it being estimated that the construction will cost \$21,500 and the extensive steel furnishings \$10,000. This important portion of the building will hereafter be known as the George Robert White Laboratories of Systematic Botany.

It would be difficult to overstate the advantages which will accrue to the Herbarium from these gifts. The old library, small, imperfectly lighted, and by no means safe from fire, was quite inadequate for the proper shelving of the books of reference, which were in consequence so closely crowded, often in double series upon the shelves, as to be difficult of access and especially subject to injury, confusion, and loss. On the other hand, the new library wing will give every facility for convenient shelving of the books, as well as methodical provision for the extensive card-catalogues, indices, maps, stored publications, filed manuscripts, etc., in all these respects greatly facilitating reference, economizing the time of the staff, and above all giving the safety merited by collections of such value. The second story of this wing will be divided into private offices and rooms for special collections.

The old laboratories, maintained by the College, were antiquated in construction and had fallen into some disrepair. They were also so full of inflammable wooden fittings and furnishings as to constitute a real danger. The George Robert White Laboratories, which will replace them and which are to be administered as a part of the Herbarium building, will possess as perfect safety as can be secured by the scrupulous exclusion of inflammable materials. They will, moreover, have complete modern equipment, greatly facilitating the work both of the instructors and students. The ample space in the second story will give the Herbarium for the first time in its history proper facilities for the safe storage of valuable collections awaiting identification or distribution. Such stored collections are especially difficult to guard from destructive influences, such as predatory insects, dust, dampness, etc., all of which, it is believed, will be thoroughly eliminated by the air-tight metal cases to be provided through Mr. White's liberality. There will also be an instrument room, a private office, and finally a large, well-lighted, and completely furnished room where the New England Botanical Club is to be permitted to keep its valuable local herbarium, a collection which, duly installed in such convenient and readily accessible quarters, will render the building in even higher degree a working center for students of the New England flora, both professional and amateur.

Plans for the new construction were matured during the spring of 1911, by Mr. W. L. Mowll, the architect of the Kidder Wing.

and the rebuilding both of the library and laboratories is now in progress.

To complete the extensive programme of reconstruction and enlargement, begun about three years ago when the Kidder Wing was planned, it remains only to rebuild the central, original section of the Herbarium, an undertaking which appears to be free from structural difficulty. Some changes are also contemplated in the arrangement and grading of adjacent portions of the Botanic Garden. These will give an appropriate setting for the building when finished, and it is confidently believed that it will possess character and dignity as well as great convenience and safety.

Among the gifts received by the Gray Herbarium during the year have been a copy of Hoola van Nooten's elaborately illustrated folio publication upon the flowers and fruits of Java, a work of value, contributed to the library by Mrs. William G. Weld of the Visiting Committee; also a bust of the late Alphonse de Candolle, a distinguished botanist of Geneva. The latter was given to the Herbarium by his son, Mr. Casimir de Candolle, in recognition of the long and intimate friendship which existed between his father and Dr. Gray.

The Visiting Committee again issued its annual circular in the interests of the Herbarium, and in prompt and generous response gifts for present use, aggregating \$1800, were received from no less than 133 subscribers, whose names and contributions are stated in the report of the Treasurer. These gifts, used chiefly to further botanical exploration and permit an increased output of scientific publication, are of great service to the establishment.

During the year twenty papers have been published by the Gray Herbarium. As their titles have been fully recorded in the *University Gazette*, they need not be repeated here.

B. L. ROBINSON, *Curator*.

THE BOTANIC GARDEN

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — I have the honor as Director to submit my second annual report on the progress and condition of the Botanic Garden.

The range of greenhouses which faced the main garden was taken down early in the year and later replaced by buildings of metal construction. In the report for 1909–10 the reasons for this extensive change were given in detail. The new range simply replaces the old one, but by altering the position of a few partitions and by a rearrangement of the walks it proved possible to increase the area devoted to plants, to secure better light and to establish a more efficient conservatory. The central part of the old range, which was originally designed for a palm house, has not been wholly satisfactory. In recent years the palms had outgrown their quarters and had rendered the conditions under them unfavorable for other plants which were, through necessity, overcrowded in adjoining houses. It was decided to abandon the plan of making a special exhibition of palms, in inadequate quarters, with the hope that sometime in the future a spacious and suitable palm house might be erected. It was further decided to convert the space occupied by the old palm house into a stove house for the excellent representation of foliage plants cultivated at the garden, and by exchanging the tallest palms and retaining young plants of the same species as duplicates, to enrich the general collection.

Early in the year the greenhouses were painted inside and out and all necessary repairs in the north range were made at a very slight expense. One of the chief causes for repairs is the quality of the steel used in the construction of the modern greenhouse bench. These benches rust out very quickly and are costly to replace. As an experiment the centre benches in the new stove house were constructed of reinforced concrete. Aside from their permanency, assured by the use of cement and metal, these benches have this advantage: they soak up water, dry out slowly and tend to keep the air favorably charged with moisture. In the future it may be well to substitute concrete benches for our metal ones and so eliminate the constantly recurring expenses of painting and replacement.

At present the two large ranges of greenhouses are in good condition, are modern throughout, and should be free from the necessity for repairs for several years.

Through exchange and by gifts, the collections were enriched from time to time. A most valuable gift came to us from Dr. N. L. Britton, Director of the New York Botanical Garden, who sent several rare forms or varieties of *Paphiopedilum insigne*. From J. H. Maiden, Director of the Botanic Gardens, Sydney, 44 packets of seeds were received. From Mexico a number of orchids were sent to the Director by Mr. C. R. Orcutt for identification. From Australia and New Zealand many seeds were sent by Messrs. Eames and Sinnott, graduates of the University, who were conducting botanical studies abroad. From the Philippines several interesting plants came to us from Mr. C. M. Weber, collector for the Ames Botanical Laboratory. Messrs. R. & J. Farquhar & Co. generously presented a large collection of bulbs which were used for the display of early spring flowers and for laboratory work. For a number of years Messrs. R. & J. Farquhar & Co. have continued to send, as a gift, bulbs and seeds, and through their kindness it is possible to make a much better floral display than we should otherwise attempt with our restricted income.

As a matter of record the report of Mr. Robert Cameron, the Head Gardener, is here included:—

The summer of 1910 was dry and severe on vegetation, but with the adequate supply of city water we were able to carry most of our plants successfully through the prolonged drought.

The trees and shrubs in the garden were thoroughly sprayed with "Disperene" at the end of May and we had no difficulty whatever with insects of any kind during the summer or fall months.

The principal work in the fall was taking down the old range of greenhouses and grading the ground for the new one.

All the plants in the greenhouses had to be stored in the upper houses through the winter. On completion of the new greenhouses they were rearranged and now look more healthy and vigorous than ever before.

During the winter there were no heavy snow storms, consequently for the greater part of the time the ground was free from snow. Such conditions are not the best for herbaceous species, and the frequent thawing and freezing injured some of these; the losses, however, were not heavy.

The hot weather came so early in the spring that our bulbous plants in the borders and beds failed to grow or flower as well as in previous years.

Shortly after Mrs. Gray's death it was decided that the Garden House, generally known as the Asa Gray House, would be, in its original location, a constant source of danger in case of fire to the valuable collections of botanical specimens preserved in the Gray Herbarium. Consequently the sale of the house and its removal were deemed advisable. In 1810 the house was built, in 1910 it was moved. After having been intimately associated with the history of American botany for a century it is fortunate that the house is to remain near the Garden, almost opposite the Gray Herbarium, on the westerly side of Garden Street.

In 1910-11 the garden was extensively used for instruction and research. During the year the physiological laboratory and the adjoining greenhouse were in continuous use by Professor Osterhout. Some of the results of his researches regarding the permeability of protoplasm have already been published (*Science*, n. s., vol. xxxiv, No. 867, pp. 187-189) and the material for future publications is at hand. In connection with his experiments Professor Osterhout has had installed an elaborate equipment for the supply of water, at different temperatures, to his cultures of aquatic plants. He reports that gratifying results are being obtained.

After the mid-year examination period the students in Botany 13 conducted work at the Garden. For this work additional space was furnished in the section adjoining the greenhouse of the physiological laboratory. (Cf. Report for 1909-10, p. 191.) Under Professor Osterhout's supervision experiments with water cultures were conducted. These proved successful, although at first rendered futile by the depredations of mice.

Mr. Bradley M. Davis continued his interesting investigations on the genus *Oenothera*. For this work additional space was furnished near Raymond Street. In the experimental plot on the upper terrace an extensive culture of hybrids between *Oenothera biennis* and *O. grandiflora* was grown and in addition several races or strains of the species which were crossed during the season. These furnished important material for the paper, "Some Hybrids of *Oenothera biennis* and *O. grandiflora* that resemble *O. Lamarckiana*" (*American Naturalist*, vol. xlv, p. 193). This paper presented a working hypothesis that *Oenothera Lamarckiana* arose as a hybrid between forms of these species and that its peculiar habit of giving rise to mutants, as described by De Vriese, is explicable as the behavior of a hybrid which is splitting off strongly marked variants.

In the late winter and spring of 1911 about one third of the space in the north range of hot-houses was devoted to a series of Davis' *Oenothera* cultures started for investigations in the summer of 1911.

Although a large part of the space available for experimental work was given over to Dr. Davis for his researches, and the services of the gardeners were furnished freely for the potting and transplanting of the numerous seedlings necessary in his work, the results promised seemed of sufficient value to warrant the Director in giving every aid at his command.

During the year Mr. B. M. Watson conducted his class in horticulture at the Garden, using the potting shed of the north range as a lecture room and the greenhouses for the cultivation of demonstratory plants.

In connection with the State Forester's Office, the propagation and distribution of the fungus-disease of the brown-tail moth larvae was continued this season under the supervision of Mr. R. H. Colley, Austin Teaching Fellow in Cryptogamic Botany, and about two hundred square feet of space in the central bed of House 14 were devoted to this purpose. The disease was successfully carried through the winter and propagated in the spring, and during the month of May a large area, including Ayer, Massachusetts, and the towns in its vicinity, was planted; several thousand bags of infected caterpillars being furnished from the disease boxes in the greenhouse for this purpose. In addition to these plantings, between one and two hundred mailing cases containing infected larvae were sent to private individuals who had applied to the Forester's Office for the material. The results of these plantings were satisfactory; although the epidemics produced were inhibited to a considerable extent by cold and dry weather, these unfavorable conditions continuing throughout the period of planting. After the completion of the spring plantings, the fungus was propagated at the Garden during the summer, and caterpillars from ten bushels of cold storage nests were reared for use in the fall plantings. The latter were continued from August 20th to September 12th, between one and two hundred thousand larvae being infected and distributed among fifty towns in eastern Massachusetts. The weather during this period was unusually favorable for the purpose in view, and the results were very gratifying; epidemics being started in every instance, which are likely to be effective in producing early natural infections next season.

The fungus disease of the gypsy moth larvae, brought from Japan in 1909 by Dr. Clinton, was again started from resting spores wintered out of doors, and a general infection in the breeding boxes was obtained by June 18th. It was not found possible, however, to make more than three plantings from this material; since, after this date, the wilt disease destroyed the larvae in the breeding and infection boxes with such rapidity that all trace of the fungus was lost early in July, and no more material was available for further plantings. No results, moreover, were observed to follow the three plantings mentioned; a general mortality from wilt being present in all of the localities where they were made. The experiences of last season were thus repeated, as far as this disease is concerned, and it seems probable that in view of the great difficulty which appears to be associated with its propagation, and its decidedly less contagious character, that results comparable to those obtained from the use of the brown-tail fungus are not to be hoped for in the future, even if the disease proves not to have been wholly lost.

As in former years material was furnished to the classes in botany, and plants required for special studies were cultivated in the greenhouses. The research courses, conducted under Professor Jeffrey's supervision in the Botanical Laboratories at the University Museum, were constantly supplied with specimens. Several papers which have been published or are about to be published from these laboratories have been wholly or in part based on plants furnished by the Botanic Garden. Taken in the aggregate the amount of material required for purposes of instruction and research is large, and in its production much space is used and a great deal of labor expended. As far as possible and to a reasonable extent specimens for botanical study are freely furnished when called for, to the schools of Cambridge.

The labels out of doors are rapidly becoming illegible through the action of the weather and must very soon be entirely replaced by new ones. Through the summer Mr. H. T. Darlington was employed in an attempt to discover by experiment some simple and reasonably permanent, yet inexpensive, form of label. A smaller label than that formerly in use, made of metal, was selected for experimental work and a method of printing from type was adopted. Hand-printed labels are costly and to look well must be printed by one skilled in lettering. Mr. Darlington's experiments with different paints, different types, and different metals were very instructive, and after the samples prepared by him

have been thoroughly tested in the open air for a year an effort will be made to replace the majority of the labels. In connection with his work Mr. Darlington prepared a detailed report which is in the files of the Garden.

A botanic garden in which the plants are wrongly named is a discredit to those who maintain it and wholly at variance with the spirit of accuracy which should characterize a scientific establishment, yet the ease with which labels are misplaced both by the workmen, and by visitors who remove a label to read it and then return it to the wrong place, and the likelihood of a single vigorous species taking possession of a whole bed where several weaker species have struggled for existence are sources of error against which it is difficult to contend. Many years have passed since any serious attempt has been made to correct the errors which have arisen through erroneous replacements of labels, mistaken judgment in naming plants, or by changes in nomenclature sanctioned by botanists. Consequently one of the most pressing scientific needs at the Garden at the present time is a thorough revision of the labels which will discover and eliminate errors and bring the nomenclature of the collections into accord with modern usage. In order to accomplish this the services of a competent systematic botanist should be secured whose entire time for at least one year could be devoted to the verification of names and the identification of doubtfully determined species.

Although the Curator of the Herbarium is ready at all times to render assistance in naming the plants in the garden submitted to him for identification, the extent of the work now to be done calls for special effort.

As in former years plants, and flowers when available, have been freely furnished for decorative purposes at college entertainments.

Monthly reports received from Mr. R. M. Grey, superintendent of the Harvard Experiment Station near Cienfuegos in Cuba, contain a detailed account of the operations for the year and indicate clearly that the economic flora of the island may be greatly enriched by the introduction of plants from tropical and subtropical countries.

Requests for material or information have been received from time to time from the United States Department of Agriculture, and these have been granted whenever possible. Several kinds of sugar cane for cultivation in Greenville, Texas, were forwarded in October, 1910. Tobacco seed for experimental work in connec-

tion with the Granville Tobacco Wilt were supplied in November. By special request a report on *Ceratonia Siliqua* L. (the carob tree) was prepared by Mr. Grey. In return for such services the Station receives from the Department of Agriculture desirable material which is of value in determining the adaptability of certain economic plants to the climate of Cuba.

The production of sugar cane from seed continues to be one of the special undertakings at the Station. This work is generally successful, notwithstanding the fact that for several years it has been hampered by unusual droughts. Some of the seedlings secured have given promising economic results, and real progress has been made.

In October, 1910, the violent storms which devastated plantations in western Cuba did not reach Cienfuegos but strong winds were felt which shook the fruit from orange and grape-fruit trees and did slight damage to the larger plants grown at the Station. On June 3, 1911, a violent whirlwind advanced directly on the Station accompanied by heavy rain. The full force of the storm lasted for forty-five minutes and in that length of time caused serious and in some cases irreparable damage. All of the large buildings, the greenhouse and windmill, were either destroyed or badly damaged. The plantations were covered deep with broken branches and other debris distributed by the winds, for the removal of which two days were necessary.

OAKES AMES, *Director.*

THE BOTANICAL MUSEUM

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — I have the honor of presenting the following report on the condition of the Botanical Museum.

The changes which have been made in one of our exhibition rooms by substituting plate-glass shelves for the thick wooden ones have resulted, as we had hoped, in giving to the cases much more light as well as somewhat more space. The heavy cost appears to be fully justified.

The steady growth of the Museum in illustrative material has been wholly due to the generosity of two anonymous friends of the University, who have borne the expense of collecting, preparing, and labelling the new acquisitions. To one of these friends we are also greatly indebted for numerous new books on the subject of economic or industrial botany. The rapid development of the subject, of late years, demands the replacement of many of the older works by more exhaustive treatises and especially by recent monographs.

A large part of our newly acquired material has been placed in insect-proof containers of an improved pattern, and installed in suitable cases in one of our store-rooms. Over fifteen hundred objects have been installed and authentically labelled for reference and consultation. These specimens have attracted so much attention from visitors, on the few days when the private rooms have been opened to the public, that steps are to be taken for adequately lighting the cases for exhibition purposes. The expense of introducing electric lights into these rooms is to be met by a friend of the University.

Our authentically named specimens of "raw" industrial plant products, such as fibres, gums, resins, tanning-barks and leaves, and the like, are more and more studied by visiting manufacturers, for accurate identification. Since it has become known that the Curator stands ready to assist in this work of identification, his gratuitous services have been largely sought and freely given.

The well-arranged material is now available for continuing the instruction in economic botany which was interrupted when Mr. Oakes Ames declined reappointment as Instructor. Mr. Ames was an inspiring teacher, conversant with many practical aspects of plant-improvement and plant uses, and he was, more-

over, familiar with the material now available in our Museum for illustration and research. The loss of his services is much to be regretted.

Owing to the admirable collections exhibited in the Museum of the Arnold Arboretum, we do not feel justified in devoting more than a very small amount of our space to the illustrations of woods and forest products. But with that reservation, it is designed to have within reach in our rooms an exhaustive collection of the plant products which are in most common use or which are promising for future development. Only those specimens will be placed on our shelves for exhibition purposes which best illustrate morphology, ecology, and economic botany. The rest of the material will be stored in convenient containers for ready consultation.

A part of our morphological material consists of the large collection of fossil plants, entrusted to the Museum by the late Alexander Agassiz, and rearranged by Dr. Robert T. Jackson. This valuable collection is now accessible to palaeontological students of sufficient training, on application to Dr. Jackson.

A large and important invoice of Mr. Blaschka's glass models of plants is looked for this summer. Until it arrives no further change in the arrangement of the models will be made in any of the rooms. During the year a short sketch of the Blaschkas and their work for the Museum was published for free distribution to the crowds of visitors, and the edition was speedily exhausted. Another and enlarged edition may be prepared after the next invoice of models arrives.

The Curator would respectfully call attention to the imperative need of soon securing for the Museum an Assistant Curator who can familiarize himself with the details of its administration. During the many years in which the Museum has been growing, there have been no less than six excellent assistants whose services have been perfectly satisfactory, and who would have made good curators, but all of them have been taken away from the service of the Museum by the much larger salary offered elsewhere. The retention of a suitable Assistant Curator is therefore largely a matter of remuneration. At present we have absolutely no invested funds from which to draw for the support of such an officer, all of our expenses being met solely by gifts for present use.

GEORGE LINCOLN GOODALE,
Honorary Curator.

THE ARNOLD ARBORETUM

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — I have the honor to submit the following report on the progress and condition of the Arnold Arboretum during the year ending June 30, 1911.

Beyond extending the existing groups of trees and shrubs with new species and varieties little planting has been accomplished since the appearance of my last report. An interesting new plantation will, however, be found on the southern slope of Bussey Hill just below the Overlook. Here in a bed 650 feet long and 15 feet wide have been planted in groups with several individuals of a species many of the plants raised from the seeds collected by Wilson during his first Arboretum expedition to China. The position is an exposed one and has been selected that the hardiness of these plants may be well tested.

After an absence of a year Mr. Wilson returned to the Arboretum in April from his second expedition to China. In spite of a serious accident in September, 1910, which nearly cost him his life, he succeeded in securing the seeds of all the cone-bearing trees from the mountains near the Tibetan frontier. To obtain information about these trees and to introduce them into cultivation were the principal objects of this journey; and the Arboretum is fortunate in having been able to distribute in this country and in Europe the seeds of these important trees which, with few exceptions, are new to science, and may be expected to play an important part in economic and ornamental planting.

The results of this second journey are the seeds of 462 species of trees and shrubs, a number of plants, including many willows and poplars, now first introduced, a large collection of lily bulbs and of terrestrial *Cypripediums*, 2,500 sheets of herbarium specimens, and 374 photographs of trees and forest scenery.

Good results have been obtained from Mr. Purdom's second season in China, passed among the little known mountains of southern Shensi. He returned to Peking at Christmas and, having forwarded his collections of seeds and herbarium specimens, started west again for Kansu, where he arrived in May.

At the end of 1911, his contract with the Arboretum ends and he will return to England.

During the year, 9,280 sheets have been inserted in the herbarium. This is the largest addition that has been made to it in any year since the herbarium was established.

The library now contains 24,747 bound volumes and 6,659 unbound pamphlets, 2,222 volumes and 423 pamphlets having been added during the year. The classified arrangement of the books on the shelves has been finished.

The interchange of plants and seeds with other horticultural and botanical establishments has been continued during the year. 10,222 plants, including grafts and cuttings, and 2,256 packets of seeds have been distributed as follows: To the United States, 8,854 plants and 561 packets of seeds; to Great Britain, 1,082 plants and 1,261 packets of seeds; to the continent of Europe, 286 plants and 366 packets of seeds; to Japan, 33 packets of seeds; to New Zealand, 28 packets of seeds; to Hawaii, 7 packets of seeds. There have been received 5,736 plants and 1,949 packets of seeds; of these 4,886 plants and 105 packets of seeds came from the United States; from Great Britain, 742 plants and 26 packets of seeds; from the continent of Europe, 108 plants and 175 packets of seeds; from Japan, 54 packets of seeds; from China, 1,589 packets of seeds (Purdom, 304; Wilson, 1,285).

During the year instruction in dendrology has been given at the Arboretum by Assistant Professor Jack to students in forestry and to a class of thirty-three special students, principally teachers.

The printing of the Bradley Bibliography has proceeded steadily through the year. The first volume will be issued during the summer and the printing of the second volume is well advanced. Work on the catalogue of the library and of the living collections has been continued.

To facilitate the study of the living collections an illustrated Guide to the Arboretum, with a map showing the position of all roads, walks, and groups of trees, has been published. During the spring twelve weekly *Bulletins of Popular Information* were distributed without charge to persons interested in the Arboretum and in the cultivation of plants. The object of these *Bulletins* is to give, from time to time, in popular language, authentic information about the plants in bloom or otherwise worthy of special visits. The demand for these *Bulletins*, not only from persons living near Boston but from all parts of the country,

seems to justify the cost of publication. To the Guide-book and to these *Bulletins* is probably due the large increase in the number of interested visitors to the Arboretum during the spring and summer of this year.

I take this opportunity to express again my thanks to the Trustees of the Massachusetts Society for Promoting Agriculture for their annual grant to increase the knowledge of trees, and to the members of the Visiting Committee who have been active and successful in enlarging the income of the Arboretum.

C. S. SARGENT, *Director*.

THE CHEMICAL LABORATORY

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — In the absence of the Director, the Chemical Laboratory was in charge of Assistant Professor Baxter during the year 1910–11.

The number of students taking both laboratory and lecture courses showed a substantial increase over that of the previous year, and the number of research students was also slightly larger. The last named class of students must necessarily be somewhat limited as long as two causes continue to operate, *viz.*, the demands upon individual instructors, owing to the smallness of the teaching force, and the restricted laboratory quarters. To the latter cause must also be assigned our inability to offer new courses, from which suggestions for research are always gained.

Twenty-six men were engaged in original investigations, under the direction of the various members of the Division, upon the following subjects: Surface tension, compressibility, boiling point, and heat of combustion of certain organic compounds; heat of neutralization of acids and bases; new methods for determining heat of solution of metals; transition temperatures of chromate and carbonate of sodium; preparation of barium and determination of its heat of solution and amalgamation; applications of the method of floating for the determination of the specific gravity of liquids, with reference to several analytical and thermometrical problems; investigation of salts fused at high temperature, with reference to residual moisture.

Atomic weights of phosphorus by analysis of the tribromide; of arsenic by titration of arsenious acid against iodic acid; of iron by the reduction of ferric oxide; vapor pressure of iodine; changes in volume during solution of certain salts in water; dissociation of phosphorus oxychloride.

Action of sulphur trioxide on silicon tetrachloride; preparation and properties of pyrosulphuryl chloride and chlorsulphonic acid.

Alkali-insoluble phenols; preparation of new octanes and nonanes; oxidation products of iodanil; derivatives and reactions of certain benzhydrols; action of ethyl and propyl magne-

sium bromides on anthraquinone, and other reactions of ethyl magnesium bromide.

Preparation of formaldehyde; investigation of certain perfumes; production of ethylene by cracking gas oil.

Twenty-three papers were published, chiefly on investigations conducted during 1909-10, and their titles may be found in the *University Gazette*. The grants of money from the Carnegie Institution of Washington, to Professor Richards of \$2500 and to Assistant Professor Baxter of \$1000, which have done so much for research in this laboratory, were continued during the past year.

The plans for the Wolcott Gibbs Research Laboratory, for which something over \$105,000 has been raised, are completed, and ground will be broken in the autumn of 1911. The building, of which Mr. A. W. Longfellow of Boston is the architect, will be situated on Divinity Avenue, south of the Peabody Museum, and is planned as one of the group of buildings which the Division of Chemistry earnestly hopes will be erected in a few years. The Gibbs Laboratory provides only for research, chiefly in inorganic and physical chemistry. Upon its occupation, which will be at the beginning of the year 1912-13, a few more rooms will be available in Boylston Hall for the purposes of research, or for small laboratory courses, but the acquisition of this building affects very slightly the situation which has so long confronted us, — that of "an old building, badly overcrowded, very ill-ventilated and quite inadequate for its purposes," as stated by you in your report for 1909-10.

During the past year was formed the Association of Harvard Chemists, of which certain of the Visiting Committee on the Chemical Laboratory constituted the nucleus. An enthusiastic meeting of the Association was held in Boston, April 10, 1911, at which steps were taken toward an organized effort to obtain money for the proposed new buildings, a sketch of which appeared in the *Harvard Bulletin* of February 8, 1911. Committees were appointed to solicit subscriptions in New York, Boston, Cleveland, and Milwaukee.

CHARLES R. SANGER, *Director*.

THE JEFFERSON PHYSICAL LABORATORY

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — In the past, it has been the policy of the instructors in the Division of Physics, in planning their own work and in guiding students engaged in research, to pursue exhaustively a single subject rather than to change the topic frequently. The following list of researches pursued in the Laboratory during the year illustrates the application of this principle: Professor Hall, Thermal Properties of Iron; Professor B. O. Peirce, Researches in Magnetism; Professor Sabine, Problems in Acoustics. During the progress of this work, tests of the acoustic properties of various materials used in the interior finish of buildings have been made. The work has been done with the coöperation of the Johns-Manville and Guastavino Companies of Boston and part of the expense has been paid by them. Professor G. W. Pierce, Wireless Telephony; Professor Morse, Storage Cells; Professor Lyman, Spectrum Analysis in the Schumann Region; and, in connection with Mr. Bovie of the Department of Botany, Experiments on the Effect of Light on Living Organisms; Professor Davis, Problems in Thermodynamics; Dr. Bridgman, Properties of Matter under Extremely High Pressure; Dr. Chaffee, The Wireless Telephone and the Velocity of Cathode Rays; Dr. Hayes, The Study of Alloys.

The titles of researches of students working in the Laboratory are as follows: Mr. Evans, Electric Conductivity of Crystals; Mr. Royster, The Joule-Thomson Effect in Thermometric Gases; Mr. Sawtelle, The Nature of the Spark Discharge; Mr. Swan, The Minimum Audible Intensity of Sound; Mr. Trueblood, The Joule-Thomson Effect in Steam; Mr. Uyeda, Electrically Coupled Circuits; Mr. Webster, The Absorption of Light.

The Laboratory is not closed during the summer and the Division of Physics has always welcomed investigators from other universities during this season. This year, Dr. Tolman of the University of Cincinnati and Mr. Smith of the University of Kansas have carried on research work during July, August, and September.

The Cutting Fellowship for Research was awarded for the first time in June; the recipient was Dr. Chaffee. The Fellowship for Research, formerly held by Dr. Bridgman, was given to Dr. Hayes. It is to be regretted that the fund for this latter Fellowship will be exhausted at the end of this year.

The building during term time was in its usual crowded condition as far as undergraduate students were concerned. The new rooms made vacant by the removal of the boilers will give some relief to the crowding among the advanced students in future.

The fire risk in the Laboratory increases from year to year. The Director believes that this risk may be greatly reduced by a sprinkling system; he therefore earnestly recommends that such a system be installed without delay.

This Division is justly proud of the amount of original work which this Laboratory turns out, but work of this kind involves very great expense. If the activity of the Laboratory is to continue unimpaired, the Endowment Fund must be increased.

The volume of Contributions for 1910 contains papers by the colleagues and former students of Professor Trowbridge as well as by men working in the Laboratory. It bears the following dedication:—

TO JOHN TROWBRIDGE

who projected a great physical laboratory for Harvard University and found the means to build and equip it, who by his foresight, invention, and care has kept this laboratory among the foremost in opportunities for scientific achievement, and by his magnanimity has made it a place proverbial for good feeling, this volume is gratefully and affectionately dedicated by those who have profited by his labors and enjoyed his friendship.

THEODORE LYMAN, *Director.*

PSYCHOLOGICAL LABORATORY

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — The Psychological Laboratory, which during my absence in Berlin was under the control of Professor E. B. Holt, was carrying on research during the year in a variety of directions, some of the investigations being continuations of work in previous years. The following pieces of research which led to definite results may be mentioned. A. S. Ford studied "Time Reversals in Suspended Perception." D. I. Patch tried to approach the problem of suggestion in some new lines. R. E. McCormick analysed experimentally "The Time Curve of the Inhibitory Effect Produced by Sensations." Probably the most important research in human psychology carried out by a graduate student was the work of J. H. Picken called "The Transition States between Various Tasks of Thought and their Relation to Feeling." In the realm of animal psychology H. W. Huntley studied "The Psychogenesis of the Rabbit."

The instructors and assistants in the laboratory were engaged in the following researches: Professor Holt continued his studies in dizziness, devoting himself last year to the localization of auditory sensations in dizziness. Professor Yerkes studied "Inheritance in the Rat." Dr. Langfeld continued his work on "Suppression and Association of Ideas," and Dr. Kallen experimented with "The Psychology of the Comic."

The experimental training course of Professor Holt and Dr. Langfeld transcended the limits of our technical capacity. We consider twenty men as the normal limit for the course. The apparatus of the laboratory was supplemented by some valuable instruments, especially in the field of vision and space perception. To be sure, Professor Holt again felt strongly the rather chronic difficulty of the laboratory, namely, that its means do not allow such buying of new instruments as would be necessary if the laboratory were really to be modernized constantly. It may appear as if a yearly budget of about fifteen hundred dollars, of which twelve hundred dollars come from the Robinson Fund and three hundred from appropriation and fees, ought to be sufficient for keeping the laboratory not only in running order, but in a state of steady improvement. Yet it must be considered that

this budget of the Psychological Laboratory is burdened to an unusual degree with expenses which do not enrich its lasting equipment. Firstly, the laboratory has to pay for all the psychological books for the library on the second floor of Emerson Hall, the periodicals as well as the monographs. The Emerson Hall library at present subscribes to thirty-six scientific magazines which have been classed as belonging to psychology. Some of them, of course, are physiological or psychiatric or pedagogical or partly philosophical. But as they are kept in the interest of the psychologists, they are charged to the account of the laboratory. Some of them might perhaps be eliminated, but it seems unwise to stop the subscription to magazines which the library owns from the first volume, as the whole value of such magazines lies in the unbroken sets. On the other hand, we believe that the periodicals are the most important part of such a library, inasmuch as the student working on research may be able to secure single books anywhere, but would have great difficulty in finding the older volumes of the magazines. These magazines now cost the laboratory two hundred dollars every year. If the collection of books, which is very small indeed, in the field of psychology is to be adjusted to the needs of the seminaries and courses, it seems that at least a hundred dollars must be spent for them every year. Thus there is an expense account of three hundred dollars which does not really touch the laboratory at all.

A second expense of only indirect interest for the laboratory work is the money which we spend for buying a hundred and fifty reprints of every publication which comes from this laboratory. As we lack the funds to print new volumes of the *Harvard Psychological Studies*, volumes which proved to be very expensive and which naturally had a very small sale, last year we went over to a less expensive policy. We publish the papers at various places in the magazines or as supplement monographs of archives, and buy a hundred and fifty reprints of them in order to collect them in volumes, which will be sent out free of charge under the old title, *Harvard Psychological Studies*. A large number of these volumes will be again put at the disposal of the Gore Hall library and be used, as previously, as material of exchange in the interest of the whole University. The expenses for these reprints are also considerable after all, and reduce the available funds of the laboratory by about a hundred to two hundred dollars more. Moreover, the laboratory finds a most serious difficulty in the fact that it cannot well do its work without a high

class mechanic in its workshop, and yet that the volume of work needed by the laboratory is hardly in proportion to the wages which a mechanic of high quality has a right to expect. We have to pay eighty dollars a month, if we are to have that type of mechanic who alone can be really useful to us, although we feel that the amount of work which is demanded by the character of our investigations hardly justifies such a luxurious appointment, as he may have plenty to do in one week and very little in another. Some psychological laboratories try to overcome this difficulty by using the free time of the mechanic for the manufacture of instruments which they sell, but so far we have not believed in the desirability of this method for the Harvard Laboratory. The small amount of money which remains after all these deductions is necessarily spent in the first place for the material, the chemicals, metals and wood, tools and supplies, which are needed from day to day. The animals, too, which are used for the psychological experiments need their regular food. In short, if all this is to be spent, hardly anything can remain to satisfy the highly important desire to buy instruments invented in other laboratories. There is no doubt that our establishment still has many glaring defects in its equipment.

HUGO MÜNSTERBERG.

THE OBSERVATORY

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — The success of a really great institution depends on its adoption and maintenance of a permanent policy. Thus, the Greenwich Observatory has attained its position by observation of the Moon and planets continuously, during more than two centuries. In like manner, for nearly a century, the Pulkowa Observatory has been the highest authority on the absolute positions of the stars. By thirty years of continuous labor, and the expenditure of more than a million dollars, the Harvard Observatory has created a field of work which is not occupied elsewhere, in photometry, photography, and spectroscopy. It is estimated that the equivalent of the entire time of one assistant is now required to furnish replies to the requests for facts which are received here from the observatories of Europe and America. These requests, each year increasing in number, generally relate to the spectrum or brightness of certain stars, and the material for reply exists only at this Observatory. It is obviously desirable that the organization required to supply this demand should be placed on a permanent basis. While no one would suggest that a plan should be continued when more useful work could be found, yet it is the first principle of good business management to provide for a demand as long as it exists. To change an established system in accordance with the wishes of any individual would be as foolish as for the trustees of a great library to convert it into an art museum because they wished to appoint a man having an extensive knowledge of art. In a large institution, the officers must be adapted to the place; in a small one, the plan of work may be changed to accord with the officers.

The excess of the expenses of the Observatory over its income has continued. Accordingly, the photographic work at the Arequipa Station has been diminished, and expenses reduced in other ways. This has not been allowed to interfere with the publication of the *Annals*, which has made better progress than ever before. The amount accomplished has been limited by the demands of the University on the Publication Office, otherwise, still better progress would have been made. For several years, copy has been supplied more rapidly than it could be printed.

Fortunately, an accumulation of the income of the Quincy Fund has permitted several volumes to be issued, without drawing on the general funds of the Observatory.

The Observatory has suffered a severe loss by the death, on May 21, 1911, of Williamina Paton Fleming, Curator of Astronomical Photographs. She was an Honorary Member of the Royal Astronomical Society, an Honorary Fellow of Wellesley College, and last winter received the gold medal of the Mexican Society of Sciences. Mrs. Fleming's record as a discoverer of new stars, of stars of the fifth type, and of other objects having peculiar spectra, was unequalled. Her gifts as an administrative officer, especially in the preparation of the *Annals*, although seriously interfering with her scientific work, were of the greatest value to the Observatory.

OBSERVATORY INSTRUMENTS

East Equatorial. — The observations with the 15-inch East Equatorial have been made by Professor O. C. Wendell and have been of the same general character as in previous years. Over eight thousand photometric comparisons have been made, mainly with the polarizing photometer with achromatic prisms. A part of the measurements relate to stars of the Algol type, others to stars whose variability is small, or doubtful, this instrument permitting slight changes to be detected with certainty. More than a thousand settings have been made on Nova Lacertae, and its comparison stars. 184 photometric measures have been made on 12 nights of the nucleus of Brooks' Comet 1911c.

With a second photometer, adapted to the measure of adjacent objects, nearly four thousand settings have been made on double stars. Thirteen eclipses of Jupiter's satellites have been observed photometrically, making 910 in all. 384 settings have been made on δ Orionis, suspected of variability. The occultations of several stars during the Lunar Eclipse of November 16, 1910, were also observed.

Meridian Circle. — The principal work of the Meridian Circle is now substantially completed and published, with the exception of the proper motion of the 8,337 stars contained in the zone $-9^{\circ} 50'$ to $-14^{\circ} 10'$. The reduction of previous catalogues to 1900.0, for comparison with the results of the present work, has been provisionally completed, and the comparison itself is so far advanced that the study of the systematic differences between the catalogues has been begun, in preparation for the examina-

tion of those stars in which such motions are known, or suspected, to exist. The instrument is now used only for time determinations, and should be reconstructed throughout before it is used for any large investigation.

HENRY DRAPER MEMORIAL

The number of photographs taken with the 11-inch Draper Telescope is 147, making 18,330 in all; with the 8-inch Draper Telescope, 449, making the total number 37,302. The entire number of photographs of the stars taken at Cambridge during the year is 3,796. The Draper Memorial Photographs continue to contribute liberally to our lists of stars having peculiar spectra. Mainly from the study of these photographs, Mrs. Fleming found two new stars, eight variables, two stars having the hydrogen lines bright, one star of the fifth type, and one gaseous nebula. Miss Cannon has found two new stars, ten variables, and two stars in which the hydrogen lines are bright. Miss Mackie has found five variables, Miss Leland and Miss Breslin, one each. The discovery of four novae in a single year is without precedent.

Plans are being made for a Revised Draper Catalogue, covering all parts of the sky, and including about fifty thousand stars of the eighth magnitude, and brighter. The classification of the spectra will be undertaken by Miss Cannon, but the time required to complete the work will depend on the force available for the laborious work of identifying with certainty every spectrum measured.

Various investigations have been carried on by Mr. King, including the determination of the photographic magnitude of the Sun and planets, comparison of the light of the Pole-star with two standard electric lights, kindly furnished by the Bureau of Standards at Washington, variability of the Pole-star and α Orionis, photographs of stars through yellow and blue screens.

BOYDEN DEPARTMENT

As Mr. Hinkley will leave Arequipa shortly, Mr. Leon Campbell was sent there to take his place, and took charge of the Station on June 1, 1911. He will divide his time between the photographic work and observations of the southern variable stars. The number of photographs taken with the 13-inch Boyden Telescope is 125, making 12,959 in all. 751 photographs were taken with the 8-inch Bache Telescope, making 42,735 in all.

The total number of stellar photographs taken at the Station during the year was 2,042. 642 estimates of variable stars have been made. The weather has continued to be extremely cloudy.

BRUCE PHOTOGRAPHIC TELESCOPE

The number of photographs taken with the 24-inch Bruce Telescope was 205, making a total of 10,509. 35 photographic charts having exposures of two hours were made of the selected areas of Kapteyn. 100 charts having exposures of one hour and 61 special plates were also made.

BLUE HILL METEOROLOGICAL OBSERVATORY

The Observatory is directed and supported by Professor A. Lawrence Rotch. Mr. S. P. Fergusson, assistant and mechanic of the Observatory for twenty-four years, resigned to become professor of meteorology at the University of Nevada. The usual observations and records were maintained at the Observatory and its two lower stations. The exploration of the air was continued by means of kites and pilot-balloons. Kites carrying meteorographs were flown on twelve of the days fixed by the International Committee for Scientific Aeronautics, and reached a mean height of 6,825 feet above sea level, which is slightly lower than the average for the two previous years. The maximum altitude was 10,900 feet. The air currents alone were observed with pilot-balloons on five international days, when the wind was insufficient to lift the kites, up to a mean height of 15,650 feet, and a maximum of 27,400 feet.

During the last summer a bulletin was posted daily at the Observatory gate containing the weather forecast, the morning observations, and their departure from normals, which was read by thousands of visitors. Data useful for aerial navigation, collected above Blue Hill, St. Louis, and the Atlantic Ocean, have been published in a series of charts entitled "Charts of the Atmosphere for the Use of Aeronauts and Aviators."

MISCELLANEOUS

Variable Stars. — The continuity of the observation of the northern variable stars of long period is likely to be seriously affected by the absence of Mr. Campbell, in Arequipa. This will, however, enable us to secure observations of the southern stars, many of which have been observed but little. The number

of observations of variable stars communicated to us by other astronomers this year has been unusually large. 1,111 observations have been received from the observers at Amherst College Observatory; 748, from Mr. M. W. Jacobs, Jr., of Harrisburg, Pa.; 544, from Mr. W. T. Olcott, of Norwich, Conn.; 59, by Mr. J. H. Eadie, of Bayonne, N. J.; 56, by Mr. S. C. Hunter, of New Rochelle, N.Y.; and during the last month, 14, by Mr. W. P. Hoge, of Pasadena, Cal. All those sending their observations here the first of each month, are recognized in the publications in *Popular Astronomy* which shows the progress of the work. To increase this material, Circular 166 was issued, pointing out the importance of continuous observations of these stars, which is almost the only way in which an observer with a small telescope can obtain results of real scientific value; also, that it is extremely important that these stars should be followed with large telescopes, when too faint for observation with less powerful instruments. All charts and other material needed for the work were promised to those who could make use of them. The replies have been most gratifying. The Editor of *Popular Astronomy* proposed the formation of a Section of observers, and Mr. W. T. Olcott undertook the laborious work of correspondence and detailed supervision. It seems probable that the amount of valuable material thus collected will be greatly increased.

Observatory of the Rev. J. H. Metcalf. — 55 photographs have been taken by Mr. Metcalf and his assistant with the 12-inch and 6-inch doublets, with an average exposure of 70 minutes. The total number of photographs to December 27, 1910, is 1,153. Owing to Mr. Metcalf's removal from Taunton to Winchester, the telescopes were not used for several months. They have now been remounted in Winchester, and are in working order.

The 16-inch Metcalf Doublet has been in regular use in Cambridge. 686 photographs have been taken, making the total number 1,297. It is now used to supplement, for the northern stars, the work of the Bruce Telescope in Arequipa. A large number of the Kapteyn Selected Areas and Harvard Standard Regions have been photographed. Unfortunately, the illumination of the sky at night by the lights of Boston and Cambridge prevents the use of very long exposures.

An investigation of the greatest importance has been undertaken with this instrument in determining the position of the Moon by photography. 106 plates have been taken, and a dis-

cussion of 11 of them by Professor Russell of Princeton shows that the position of the Moon can be determined in this way with an accuracy slightly greater than that of the best observations with meridian circles.

Additional Investigations. — Besides the work described in other portions of this report, many other investigations are in progress. Miss Leavitt has derived final values of the photographic magnitudes of the sequence of stars near the North Pole. As these magnitudes were derived by several independent methods it is probable that they represent a true scale. Measures of the photographic magnitudes of 48 sequences distributed throughout the sky have been continued by Miss Leland. A systematic search for variable stars in all parts of the sky, mainly by Miss Cannon and Miss Leavitt, is now two-thirds completed. Reduction of the precise positions of sixteen thousand faint stars published in H.A. 1, 2, and 6, by Miss Harwood, is nearly completed and copy for the printer has been prepared for the first five hours.

Library. — The Library of the Observatory has been increased by 288 volumes and 1,675 pamphlets, making the total number 13,530 volumes and 31,272 pamphlets. It is scattered through the various rooms of the Observatory, and continues in constant danger of destruction by fire.

Telegraphic Announcements. — Forty-seven telegraphic announcements have been made, mainly relating to the discovery and observation of comets. They are sent to all who wish for them, free of expense beyond that charged in each case by the telegraphic company. The introduction of the Night Letter system permits messages to be sent in ordinary language, instead of in cipher, without increased expense, and generally without serious delay. A change in the rules of the telegraph company has doubled the cost of the cipher messages on land lines. Subscribers are given the option of either service.

Cablegrams intended for this Observatory should be addressed "Observatory, Boston," and all telegrams, "Harvard College Observatory, Cambridge, Mass." All correspondence should be addressed to the Director.

Forty-two neostyle bulletins have been issued, making the total number 467. They form a very quick and convenient method of keeping astronomers informed of current work. Many interesting facts are communicated to us and thus distributed to our subscribers without charge.

Publications. — Good progress has been made in the publication of the *Annals*, and it is expected that still better results, as regards the completion of volumes, will be made during the coming year. 56, No. 5; 59, Nos. 6, 7, and 8; 64, No. 7; 65; 66; 68, Part 2; 71, No. 1, have been distributed. Of the unfinished volumes, 47, Part 2, *Photographic Magnitudes of 107 Variable Stars of Long Period*, is nearly completed, and will be sent to the printer in a few weeks. 56, No. 6, *Stars having Peculiar Spectra*, is about two-thirds in type. 59, No. 9, *Tests of Photographic Plates, 1902 to 1910*, is in the hands of the printer. 61, Part 3, *A Statistical Investigation of Cometary Orbits*, is in type. 62, Part 2, *Ledgers of Stars in the Zone $-9^{\circ} 50'$ to $-14^{\circ} 10'$* , is printed and at the binders. 63, Part 1, *Observations of 328 Variable Stars of Long Period*, is nearly all in type. 67, *Catalogue of 8,337 Stars in the Zone $-9^{\circ} 50'$ to $-14^{\circ} 10'$* , was sent to Germany to be printed, more than a year ago. Proof of the first few pages has recently been sent to us. 71, No. 2, *Spectra and Photographic Magnitudes of Stars in Standard Regions*, is ready for distribution. 72, No. 1, *Position of the Moon determined Photographically*, is in type. 72, No. 2, *1655 New Nebulae*, is in the hands of the printer. A few pages of 73, Part 1, *Blue Hill Meteorological Observations, 1909*, are in type.

The set of the *Annals*, from 1 to 60, is therefore completed and distributed, with the exception of portions of 47, 56, and 59. 65, 66, 68, 70, and portions of 61, 62, 64, 69, and 71 are also distributed. 74 is the first volume which is not partly in type. It is hoped that 1 to 70 will be completed this year with the exception of Part 2 of 63, and 69. A description of the contents of the *Annals* is also in type.

Four Circulars have been issued, whose numbers, titles, and dates are as follows: —

- 163. 181325. *Nova Sagittarii*, No. 3. H.V. 3306. January 19, 1911.
- 164. *Nova Sagittarii*, No. 4. Five New Variable Stars. March 18, 1911.
- 165. Three New Variable Stars in Harvard Map, No. 22. April 10, 1911.
- 166. *Coöperation in Observing Variable Stars*. June 29, 1911.

Various other publications by officers of the Observatory are described in the *Harvard University Gazette*, each month.

EDWARD C. PICKERING, *Director*.

MUSEUM OF COMPARATIVE ZOÖLOGY

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — Twenty courses in Zoölogy were given during the academic year 1910-11 by Professors Mark, Parker, Wheeler, Castle, Rand, East, and Mr. Brues to two hundred and fifty-four students in Harvard University.

Messrs. E. A. Boyden, E. C. Day, John Detlefsen, S. I. Kornhauser, Henry Laurens, C. C. Little, W. R. B. Robertson and R. A. Spaeth served as Assistants in these courses.

The Virginia Barret Gibbs Scholarship was held by Mr. R. A. Spaeth, and the income of the Humboldt Fund aided three students, two while at work at the Bermuda Biological Station for Research and one engaged in research at Woods Hole.

Five courses in Zoölogy were taken by thirty-five students of Radcliffe College. This instruction was given by Professors Mark and Rand and Mr. D. W. Davis. Messrs. Boyden, Kornhauser, and Spaeth were the Assistants for the Radcliffe instruction.

During the academic year 1909-10 the number of students and of courses was: —

Harvard, seventeen courses, two hundred and ninety-seven students; *Radcliffe*, four courses, twenty-four students.

In the Department of Geology and Geography the instruction by the regular staff was given by Professors Davis, Ward, Woodworth, Johnson, and Dr. Lahee, assisted by Messrs. S. C. Lawrence, W. G. Reed, Jr., R. E. Sawyer, Sedgwick Smith, and Edward Wigglesworth. Dr. Lahee also assisted Professor Woodworth in one course.

By the courtesy of the Massachusetts Institute of Technology five students of Harvard University were admitted to courses in Palaeontology given by Professor H. W. Shimer at the Institute.

Seventeen courses were taken by three hundred and fifteen students in Harvard University and six courses were taken by twenty-one students in Radcliffe College.

In 1909-10 the number of courses and of students was: — *Harvard*, eighteen courses, two hundred and fifty-five students; *Radcliffe*, six courses, twenty-one students.

The income of the Josiah Dwight Whitney Scholarship Fund aided two students in geological and geographical work in Montana, Washington, and British Columbia.

A marble tablet inscribed:—

In memory
of
Alexander Agassiz
1835–1910
Omnia quae hic vides monumentum

has been set in the wall of the Entrance Hall (Oxford Street) of the Museum. The tablet is the gift of Mr. Agassiz's sons, George Russell Agassiz, Maximilian Agassiz, and Rodolphe Louis Agassiz.

The Corporation has installed automatic sprinklers in the boiler rooms, preparators' rooms, work shops, and photographic rooms in the basement. The windows of a few rooms between the Museum halls and the Zoölogical laboratories have been refitted with resistant glass, and a very large proportion of the windows throughout the whole Museum have been furnished with metal weather strips. Tested to a limited extent a few years ago this appliance gave most satisfactory results, and its introduction throughout the Museum and especially in the basement during the past winter showed at once that both for cleanliness and as an economizer of fuel it will be of great and permanent usefulness. Following the policy of recent years the renovation of the work rooms and of the exhibition cases has been continued; three rooms have been renovated this year and new exhibition cases have been built for the systematic collection of mammals and for the North American faunal collections. For the research collections new cases have been built for the ornithological, herpetological, and entomological departments.

To Dr. Thomas Barbour and Mr. Louis A. Shaw the Museum's thanks are due for financial aid which has been used for improvements in the work rooms and for their better equipment.

Mr. John E. Thayer continues a most generous contributor to the collections of the Museum. His gifts to the ornithological department in many cases have anticipated its needs and have made it a most effective study collection of the birds of the world.

Through Mr. Thayer's liberality the Museum also possesses the valuable series of letters and drawings of Alexander Wilson and John J. Audubon, formerly the property of the late Joseph M. Wade. The Wilsoniana contains seventy of Wilson's original drawings of birds, a sketch of his school house, and one of the "Sorrel Horse Inn." These drawings vary as to completeness; some are but rough outlines, while others are finished in all details

and are superior both in perspective and in delicacy to the engraved plates by Alexander Lawson in the "American Ornithology." There are sixteen autograph letters of Wilson ranging in date from 1803 to 1810, two autograph poems, and his book of receipts for the engraving and coloring of the plates of his "American Ornithology."

The Auduboniana included in Mr. Thayer's gift consists of five original drawings by John J. Audubon and seventy-three of his autograph letters written chiefly to Dr. John Bachman. There are a few letters of Mrs. Audubon, one letter of her son, John W. Audubon, and sixty letters of another son, Victor G. Audubon.

Letters of John Bachman, J. G. Bell, T. M. Brewer, Richard Harlan, Edward Harris, Robert Jameson, George Ord, J. K. Townsend, and many others, are included in Mr. Thayer's gift.

Some of these letters, together with extracts from the ledgers and day-books kept by John J. Audubon and his sons during the publication of their works on the birds and mammals of North America, will be published at some future date.

The Museum is also the fortunate possessor, through the kindness of Mrs. Anna Davis Hallowell, of an Alexander Wilson memento of very great interest. This is a vertical sun-dial made by Wilson himself during the closing years of the eighteenth century. The dial is a simple slab of fine white marble, about thirteen inches square, with

1800

Alex Wilfon

cut in; the gnomon is of iron. Mrs. Hallowell writes me that this sun-dial was given to her by her "father, Edward H. Davis of Philadelphia some time about 1870. He bought it from an old woman who had a garden on the Old York Road, near Milestown Pa., who had inherited it from her parents, and knowing my father's knowledge of birds and gardening, offered it to him. In like manner he gave it to me, and as our old house at South Yarmouth had the same date, (1800) I have kept it in our garden, until my brother, Professor Wm. M. Davis, suggested that it would be safer with you. I therefore desire to present the dial to the Museum of Comparative Zoölogy."

From Dr. John C. Phillips the Museum has received large and valuable series of birds and mammals; among the latter especial mention should be made of a remarkably fine skull with horns attached of a male of the typical southern race of the White

Rhinoceros (*Rhinoceros simus*). This race is now practically extinct, and though Dr. Phillips's specimen lacks data, it, without doubt, came from Zululand. The front horn is massive and measures thirty-one and one-half inches; it is typical in form with recurving tip, while the hind horn is quite small, only ten inches in length, and has a short compressed smooth tip. This skull has been placed on exhibition on the wall of the Divinity Avenue Entrance Hall.

Dr. Phillips, in addition to his valuable gifts to the collections, has most generously supplied the means by which an additional Preparator has been added to the Museum staff. Since August, 1910, Mr. Walter R. Zappey has been engaged almost continuously upon the research collections of birds and mammals, where his skill and industry are rapidly improving specimens received in the rough. He has also, in addition to several small mammals prepared for the exhibition rooms, mounted for the North American room a pair of Nelson's Sheep, *Ovis nelsoni*, collected by Dr. Phillips in Lower California.

Dr. Thomas Barbour has worked on the collections of amphibians and reptiles throughout the year; his generous expenditure of time and money has greatly enhanced the value and extent of these collections. He has also presented many valuable specimens to the collections of other departments of the Museum, especially the ornithological and entomological departments.

For a handsome male Javan Peacock, *Pavo muticus*, acknowledgment is due Mr. William Barbour. This specimen, mounted by Mr. Zappey, is shown in the Indo-Asiatic room.

The thanks of the Museum are tendered the New York Zoological Society which has given, as in former years, a considerable number of reptiles; most of these have made, through Mr. Nelson's skill, admirable exhibition mounts. It was a satisfaction to the Museum to be able to offer this Society, as a slight return for similar favors in past years, a living Haytian Solenodon which had been in the Museum since 8 December, 1908; unfortunately, however, it survived in New York but a few months, and its skeleton, prepared by Mr. Nelson, is on exhibition in the systematic collection of mammals.

For a collection of shells of great scientific value, the Museum is indebted to Mrs. F. Woodward Earl (Marie Binney Earl). Dr. Amos Binney, Mrs. Earl's grandfather, was the author of a work on the terrestrial mollusks of the United States which remains to-day unexcelled. The manual, "The Terrestrial Air-breathing

Mollusks of the United States and the Adjacent Territories of North America," by her father, William Greene Binney, was published as volumes four and five of the Bulletin of this Museum. These volumes, with the several supplements issued later, maintain the reputation of Amos Binney.

Mrs. Earl's gift, the William Greene Binney collection, consists of nearly nine hundred lots of pulmonate gasteropods with the types and typical material illustrative of W. G. Binney's studies; though lacking large numbers of specimens of any form, its well-selected series show in admirable detail the variation and distribution of the species represented.

During his studies of Palaeozoic Echini, Dr. R. T. Jackson amassed a large series of specimens of recent forms. These he has most generously presented to the Museum, and, though the Museum's series of recent Echini is an especially large and complete one, Dr. Jackson's donation contains many that are most desirable additions, including all the Mesozoic and recent forms figured in his monograph of the Echini (*Memoirs Boston Society of Natural History*, vol. 7). There are also a large number that can be used advantageously for exchanges.

In the early years of this Museum its stores were enriched by large and valuable collections gotten together by zealous missionaries in many parts of the globe. One of the notable instances of this work was that of the Rev. M. M. Carleton. Mr. Carleton's collections, received during the early seventies, were made almost entirely about Amballa and Koolloo, India, and their value is increasingly recognized each year.

It is especially gratifying to record a similar service this year. To the Rev. George Schwarb the Museum is much indebted for many and most desirable additions to its series of reptiles and amphibians. Collected in western equatorial Africa, Mr. Schwarb's specimens add a number of species previously unrepresented in the Museum collections, and they are, moreover, in excellent condition for study.

In the name of the late Francis A. Pierce, Mrs. Pierce has most kindly given the Museum a collection of skulls and horns of ungulates, some of which have been mounted by Mr. Nelson and are shown on the wall of the Divinity Avenue Entrance Hall.

The Museum is indebted to Mr. L. J. de G. de Milhau for another instalment of Icelandic birds. These as well as previous sendings have been prepared by Rowland Ward and are presented as the joint gift of Mr. de Milhau and the late Mr. J. W. Hastings.

The Museum is also indebted to Miss H. E. Hooker, and to Messrs. E. N. Fischer, Henry Hales, and William McNeil for specimens for its collection of domestic fowls; to Col. John Caswell, for a skin and skeleton of the rare African Nandi Maned Rat, *Lophiomys testudo*; to Mr. R. A. Spaeth, for a series of copepods; to Professor W. M. Wheeler, for some desirable arachnids and myriopods from the western United States, and to the American Museum of Natural History, for the skin and skeleton of the West Indian Seal, *Monachus tropicalis*. Professor J. B. Woodworth and Mr. R. W. Sayles have presented fossils of value, and acknowledgment is also due Mr. W. T. Davis and the Honorable Mason Mitchell for specimens sent to the Museum.

Thanks to the kind interest of Mr. J. H. Emerton and Miss E. B. Bryant the collection of Araneida is in excellent condition; by their work and their gifts the value of the collection is greatly enhanced.

The Museum is indebted to Professor S. F. Clarke for the identification of a series of hydroids loaned him for study several years ago. Professor A. E. Verrill has studied at the Museum such of the alcyonarian corals as relate to his report on the species collected by the U. S. Coast Survey Steamer "Blake." For this report ninety-eight plates have been delivered and the text and remaining plates are well advanced.

The ornithological collections have profited greatly by the zealous work of Mr. Bangs. The addition of a large case for the research collection of skins has enabled him to arrange the passerine families, Fringillidae to Streperidae inclusive, in the order of Sharpe's Hand-list; this work necessitated the reidentification of many skins and also took considerable time for labelling and cataloguing. In addition to the above, Mr. Bangs has kept the ordinary current work of the ornithological department well in hand.

Mr. Robert W. Sayles who has had charge of the exhibition collections in the Geological Section of the Museum since December, 1906, is rapidly making the rooms devoted to these collections instructive to students and attractive to the general visitor. Attention may be called to a model illustrative of earthquake action and to one of a Japanese earthquake-proof house, that have been installed this year.

Dr. G. M. Allen has continued his work on the collection of mammals; he has finished the revision of the Muridae, Spalacidae, and Geomyidae and also the alcoholic specimens of monotremes,

marsupials, and primates. Dr. Allen spent five weeks in Grenada collecting in the interests of the Museum and, as in previous years, he has devoted a portion of his time to research. One of the results, *Mammals of the West Indies*, was issued as Bulletin M. C. Z., vol. 54, no. 6, pp. 175-263; another, an account of the species of *Proechidna*, is practically complete.

Mr. W. F. Clapp was employed for a few months on the Molluscan collections. Under Dr. Faxon's direction and with the voluntary aid of Mrs. N. A. Clapp, a large amount of routine work was accomplished. Mr. Clapp also collected for the Museum large series of shells in New England and in Florida. The Museum is very much indebted to Mrs. Clapp for her earnest work throughout the year.

Mr. Nelson's work has, as usual, been varied in scope: it includes the remounting and repair of a considerable number of skeletons of reptiles, birds, and mammals, a work long needed and one which has improved the appearance of the exhibition cases. He has made and mounted some skeletons not previously shown in the exhibition series, has continued his successful work of mounting reptiles for exhibition, and has also mounted a series of finches for the West Indian faunal collection. As in previous years his handiwork, both photographic and mechanical, is serviceable throughout the Museum.

The Museum is again under obligations to Messrs. Faxon, Brewster, Woodworth, Bangs, Bigelow, and Sayles for their interest in their respective departments.

To the exhibition collections have been added a number of fishes mounted by Mr. S. F. Denton. Mr. Denton has also mounted several specimens of Salmon, *Salmo salar*, which Dr. John Collins Warren was good enough to send from Quebec for this purpose. A few North American mammals obtained through the kind coöperation of Mr. H. E. Redmund have been mounted by Mr. Nelson, and an especially handsome specimen of the European Bison, *Bos bonasus*, purchased of Rowland Ward, fills a place too long vacant in the systematic collection. The Museum has also obtained by purchase a skin with skeleton of Père David's Milou Deer, *Elaphurus davidianus*, a very rare species found only in northern China and closely related to North American forms.

For its research collections the Museum has acquired some selachians of unusual interest; fragments of fossil fishes from the

Lower Old Red Sandstone of Scotland; fossil vertebrates from the Cretaceous of western Kansas; and additional series of Rotifera.

Drs. Clark and Bigelow collected for two weeks in August, 1910, at Grand Manan, and the same length of time was spent at the same place in July, 1911, by Dr. Clark. Though the results of the dredging and of the surface collecting were rather meagre, some interesting forms were obtained by shore work. Dr. Clark also made quite an advance toward a satisfactory preparation of starfishes. During the past summer Dr. Bigelow devised and tested satisfactorily a closing net for horizontal towing. This work was carried on in Massachusetts Bay and in the Gulf of Maine, and for the opportunity to undertake it as well as the expedition to Grand Manan in 1910, acknowledgment is due Mr. Joseph S. Bigelow, Jr., who most kindly placed his yacht at the disposal of Drs. Bigelow and Clark.

Dr. G. M. Allen and Mr. C. T. Brues collected, during their stay of five weeks in Grenada, B. W. I., many desirable mammals, birds, and reptiles, together with some invertebrates of exceptional interest. The generosity of Dr. Thomas Barbour enabled Messrs. Allen and Brues to undertake this work for the Museum.

The Library contains 48,019 volumes, and 44,442 pamphlets; the accessions for the year are 1,095 volumes, and 1,075 pamphlets.

An Audubon plate of peculiar interest, a gift of Mr. John E. Thayer, has been hung in the Library; it represents *three* Clapper Rails in place of *two* shown in Audubon's published works; both the arrangement of the birds and the background differ from the Havell plate. The plate given by Mr. Thayer was printed by Childs and Inman, Philadelphia, and is dated 1832; the date of the Havell plate is 1834.

There have been placed in the Library two noteworthy records of Mr. Agassiz: one, the original manuscript from which the abstract of his first scientific paper on the mechanism of the flight of Lepidoptera (*Proc. Boston Society of Natural History*, February, 1859) was made, and the other, a case with a number of beautiful drawings on wood, the work of Mr. Agassiz during the early years of the Museum; these figures were drawn for a text-book of zoölogy, proposed, but never carried to completion, by his father. The manuscript is the property of Mrs. George R. Agassiz and has been kindly loaned by her.

The publications for the year include one volume and four numbers of the *Memoirs*, eight numbers of the *Bulletin* and the

Annual Report, a total of 975 (681 quarto, 294 octavo) pages and 138 (110 quarto, 28 octavo) plates.

The volume and two numbers of the *Memoirs* contain reports on the scientific results of expeditions carried on under Mr. Agassiz's direction. Mr. Springer's *Memoir* is a continuation of his studies of fossil crinoids, some of which have been published in earlier volumes of the *Memoirs*. The other *Memoir* and six numbers of the *Bulletin* represent work of the Museum staff or reports on collections of the Museum; one number of the *Bulletin* is a Contribution from the Zoölogical Laboratory and one number contains Sir John Murray's address on Mr. Agassiz's life and scientific work.

To assist in the publication of Contributions from the Zoölogical and Geological Laboratories the Corporation has continued the usual appropriation of \$350.

For the publication of the Reports on the expeditions of the "Blake" and "Albatross," and for some other *Memoirs* in which he was interested, Mr. Agassiz made provision by his will. Of the "Blake" reports that of Dr. Hartlaub on the Comatulæ is in type and will be published during the coming year. Mention has been made of the progress of Professor Verrill's work on the alcyonarians and it is hoped that this also will be issued before the close of the Museum year 1911-12. With these extensive reports published there is, with the exception of the Crustacea now in the hands of Professor Bouvier, but little "Blake" material still unworked. For the three expeditions of the "Albatross," those of 1891, 1899-1900, and 1904-05, the reports of Dr. Hansen on the schizopods, Dr. Bigelow on the siphonophores, and that of Messrs. Kendall and Radcliffe on the shore fishes of the expedition of 1904-05, will be issued during the year. Mr. Garman's monograph of the plagiostomes will also be published at an early date. Several other reports on the collections of the "Albatross" are in a forward state of preparation.

SAMUEL HENSHAW.

THE ZOÖLOGICAL LABORATORY

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — Aside from the changes due to the regular alternation of certain courses, the courses of instruction in Zoölogy during 1910-11 were substantially the same as in 1909-10, with one exception,—the addition of Zoölogy 7*d*, Forest Entomology. Merely formal changes were: the substitution of "Practical Entomology" for "Common Economic Insects and Methods of Controlling Them" as a description of Zoölogy 7*c*, and the designation by new numbers of two of the fields of research previously offered: "20*b*, Cytology, with Special Reference to Heredity," and "20*g*, Experimental Morphology."

As usual, the following tables show the number of students in each of the several classes who attended each of the courses in Zoölogy. The first table exhibits the facts for Harvard University, the second for Radcliffe College.

TABLE I

Courses 1910-11	Graduate		Senior	Junior	Soph.	Fresh.	Special	Uncl.	Total
	A. & S.	Ap. Sci.							
Zoölogy 1	3	...	10	8	30	68	4	6	129
" 2	1	...	...	7	8	7	...	1	24
" 3	3	...	3	5	3	1	...	...	15
" 4	1	...	1	1	1	1	...	...	5
" 5 <i>a</i>	...	...	1	1	1	...	...	...	3
" 7 <i>a</i>	4	2	1	2	...	1	...	...	10
" 7 <i>b</i>	2	2	1	2	...	1	...	...	8
" 7 <i>c</i>	...	2	2	...	...	...	...	...	4
" 7 <i>d</i>	...	9	...	...	...	...	...	...	9
" 11	...	2	3	2	3	...	...	...	10
" 12	3	...	...	...	...	...	...	...	3
" 14 <i>b</i>	7	3	...	2	...	...	...	...	12
" 17	2	1	...	...	...	...	...	...	3
" 20 <i>a</i>	2	...	...	...	...	...	...	...	2
" 20 <i>b</i>	3	...	...	...	...	...	...	...	3
" 20 <i>c</i>	5	...	...	...	...	...	...	...	5
" 20 <i>d</i>	2	1	...	...	...	...	...	...	3
" 20 <i>e</i>	1	...	1	...	...	...	...	...	2
" 20 <i>f</i>	...	3	...	...	...	...	...	...	3
" 20 <i>g</i>	1	...	...	...	...	...	...	...	1
Sums ..	40	25	23	30	46	79	4	7	254

TABLE II

Courses 1910-11	Gr.	Senior	Junior	Soph.	Fresh.	Special	Total
Zoölogy 1 . . . . .	. . .	3	8	2	8	3	24
" 2 . . . . .	. . .	1	3	. . .	1	1	6
" 3	1	. . .	1	1	. . .	. . .	3
" 4	1	. . .	. . .	. . .	. . .	. . .	1
" 5a	1	. . .	. . .	. . .	. . .	. . .	1
Sums	3	4	12	3	9	4	35

Nineteen students (fourteen registered in the Graduate School of Arts and Sciences, four in the Graduate School of Applied Science, and one Senior) carried on researches, five each under Professors Mark and Parker, and three each under Professors Wheeler, Castle, and Rand.

Of these, four met the requirements for, and received in June, the doctor's degree, three — Messrs. Barbour, Day, and Laurens — receiving the degree Ph.D., and one — Mr. Titus — the degree S.D. The thesis of Thomas Barbour was entitled "*A Contribution to the Zoögeography of the East Indian Islands*"; that of Edward C. Day, "*The Effect of Colored Light on Pigment Migration in the Eye of the Crayfish*"; that of Henry Laurens, "*The Reactions of Amphibians to Monochromatic Lights of Equal Intensity*," and that of Edward G. Titus, "*Monograph of the Genera Phytomus and Hypera*." Mr. Samuel C. Palmer completed the requirements for the degree of Ph.D., but too late for recommendation in June. His thesis is entitled "*The Numerical Relations of the Histological Elements in the Vertebrate Retina*." The thesis of Mr. J. W. Chapman, on "*Insects Injurious to the Trees in the College Yard*," was accepted and will be published soon. Satisfactory work was accomplished by the other research students.

Two students received aid from the income of the Humboldt Fund to the amount of \$138.57 while working at the Bermuda Biological Station, and one while working at Woods Hole received from the same source \$58.00.

The Bermuda Biological Station was opened June 26, and closed August 5. Of the four persons enrolled, three were connected with Harvard University. Three numbers of the Contributions from the Station have been published during the year.

During the April recess Professor Mark delivered a lecture at Colgate University on "Some Vestigial Organs in Man."

Professor Parker spent much time during the year in perfecting an appliance for the production of spectral light of measured intensity. He also wrote for "*Folia Neurobiologica*" reviews of the American papers on the physiology of the nervous system.

Professor Wheeler's assistant, Mr. W. Reiff, devoted one half his time to a continuation of the study of the wilt disease of the gypsy moth, in coöperation with the State Forester, the other half being given to work on the Bussey collection of insects.

During November and December Professor Castle delivered a course of eight lectures at the Lowell Institute in Boston on "Heredity in Relation to Evolution and Animal Breeding." The lectures are to be published. In February, 1911, he delivered a lecture on "The Nature of Unit Characters," before the Harvey Society of New York, and in July, 1911, at the University of Chicago, two lectures, on "The Methods of Evolution" and on "Heredity and Sex." These three lectures are also to be published. Professor Castle has had in his research work the coöperation of Research Fellow Dr. J. C. Phillips.

Mr. Brues has devoted some time to the preparation of a poster for the Women's Municipal League illustrating the activities of the housefly.

The Zoölogical Club held twenty-three meetings; twenty original papers and seven reviews were presented. The average attendance was between fourteen and fifteen.

During the period covered by this report 41 zoölogical papers have been published. As their titles have been recorded in the *University Gazette*, and in the annual report of the Curator of the Museum of Comparative Zoölogy, they need not be repeated here.

EDWARD L. MARK, *Director*.

MINERALOGICAL MUSEUM AND LABORATORIES OF MINERALOGY AND PETROGRAPHY

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — The public Mineralogical Collections have been increased by about one hundred specimens, received in larger part as gifts from a dozen different donors. The most valuable and important single acquisition comprised a dozen blocks of the translucent green Smithsonite (zinc carbonate) from Kelly, New Mexico, weighing in all 600 pounds, which, after some of the larger surfaces had been cleaned and polished, was placed on exhibition; this was the gift of Mr. Robert W. Bull, '96, at the suggestion of Mr. A. F. Holden, '88, who keeps the interests of our Museum constantly in mind. Other important specimens include a large group of Colorado vivanite, a large white topaz from Texas, and pyrargyrite from Mexico. In a trip made by the instructors and students of the Department to Franklin Furnace and Paterson, New Jersey, a number of fine specimens were obtained from these well-known localities.

The Curator has spent some time in a study of the serpentines of Newfane, Vermont. The usual courses of instruction were given in the laboratories and the teaching plant maintained at its present high standard and even improved.

JOHN E. WOLFF, *Curator*.

THE PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY AND ETHNOLOGY

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—It is my sad duty to begin my annual report by recording the loss of two of our distinguished and honored associates. Judge Francis Cabot Lowell died on March 6, 1911. Mr. Lowell was elected Trustee and Treasurer of the Board of Trustees at a meeting held on June 22, 1885. From that time Mr. Lowell was an interested and active member of the board, and, according to our records, he never missed a meeting for thirteen years. When in 1896 the Trustees decided that it would be for the best interests of the Museum to make over their trust to Harvard University, Mr. Lowell took an active part in attending to the legal matters pertaining to the transfer of the trust. On the accomplishment of this transfer, January 1, 1897, Mr. Lowell became a member of the Faculty of the Museum, of which the other members were President Eliot, Stephen Salisbury, Charles P. Bowditch, and the Peabody Professor. After Mr. Lowell's appointment as United States District Judge, and later, in 1905, as Circuit Judge, his arduous duties prevented him from attending the meetings regularly, but he came when he could. The last time we had him with us was at the annual meeting in 1908, but his interest in the Museum continued, and he was often consulted by other members of the Faculty on important matters relating to its welfare.

Another member of the former Board of Trustees, Dr. Samuel Hubbard Scudder, died on May 17, 1911, after a lingering illness of several years. Mr. Scudder became a member of the Board of Trustees in 1880, succeeding Mr. T. T. Bouvé as President of the Boston Society of Natural History. In 1897 he resigned that office, but remained a Trustee by election on the resignation of Colonel Lyman owing to ill health. Mr. Scudder continued a member of the Board of Trustees until it ceased to exist by the transfer of the Trust to the University in 1897. During the time that Mr. Scudder held this office several important matters came before the Board of Trustees for settlement, and the records show that he was appointed on special committees in which he

took an active part. As a distinguished and broad-minded naturalist, brought up in the school of Agassiz, he fully appreciated the objects of the Museum, and was one with whom the Curator could confer on all scientific and administrative matters with the surety of receiving valuable advice and cordial support.

By the establishment of the new assistantship provided for by the Mary Hemenway Fund for Archaeology, much has been accomplished in connection with the cataloguing and arranging of portions of the archaeological collections that have long been in storage. This important work can now be continued until many thousands of specimens, still in storage, are catalogued, numbered, and made available for research.

Thanks to the interest of Mr. Augustus Hemenway, who has provided for the repairs and painting of the exhibition halls and for the repainting of the interior of the cases, Mr. Willoughby has been able to rearrange the collections in several halls, and to place on exhibition some recent accessions and a few collections that have been in storage. During this rearrangement Mr. Willoughby has prepared many general and special labels which have been printed. With the assistance of Mr. Guernsey he has been able to catalogue and care for the accessions during the year.

As a protection in case of accident we are now having copies made of the fifteen early volumes of the manuscript catalogue of the specimens in the Museum. Beginning with the sixteenth volume, the catalogue has been made in duplicate. These duplicate volumes will eventually be kept in the contemplated fire-proof vault.

Assistant Professor Dixon, Librarian of the Museum, reports that 277 volumes and 547 pamphlets have been added during the year, and our anthropological library now contains 4,172 volumes and 4,003 pamphlets. A new iron book stack and a new case of drawers for the standard catalogue cards have been added during the year.

From funds furnished by the Committee on Central American Research the Museum has published and issued under one cover *Memoirs*, Vol. V, Nos. 1 and 2, 135 pages, 47 text figures, 2 maps, and 30 plates, 1911. No. 1 is the final report by Mr. Teobert Maler, who was for several years employed by the Museum to explore various prehistoric sites in Central America. This report is on the Ruins of Tikal in Guatemala and contains heliotype reproductions of thirty of Mr. Maler's unexcelled photographs of

the temples and buildings of the prehistoric city, as well as plans and drawings of many of the ruined structures. No. 2 is a preliminary report on Tikal by Dr. A. M. Tozzer, who was in charge of the Museum Expedition of 1909-10. It contains a large map, with cross sections of the city, and plans of numerous buildings, not given in Mr. Maler's report. The two complementary reports thus give as full an account of the ruins of Tikal as is possible at this time.

The Committee also provided for the expedition of 1910-11, under the charge of Mr. R. E. Merwin, Central American Fellow. This expedition made an exploration of Holmul, a ruined city discovered by the expedition of 1909-10, and visited several sites in the District of Peten.

Another publication of special importance is that of the Archaeology of the Delaware Valley by Mr. Ernest Volk, — Papers, Vol. V, 258 pages, 26 text illustrations, 125 plates, 1911. This is Mr. Volk's report on twenty-two years of research under my direction in the Delaware Valley. In this volume are given the facts as discovered and presented by Mr. Volk, relating to the long controverted subject of Glacial Man in America. The evidence is given showing that man was contemporaneous, during the closing period of the glacial age, with the deposition of the Trenton gravel and the yellow drift in the valley. For the publication of this volume we are indebted to the interest and generosity of Dr. Charles Peabody.

In addition to the above, the Museum has received the following gifts of money for various purposes during the year: —

Mr. John Stetson, his annual gift of \$100 and an additional gift of \$100 for the purchase of books	\$200.00
Professor H. W. Haynes, his annual gift for the library . .	55.00
Dr. John C. Phillips, cost of typewriter for the library . .	86.00
A Friend, for binding books in the library	100.00
Mrs. N. E. Baylies, annual gift for Museum incidentals . .	25.00
Miss Mary L. Ware, for a salary	480.00
Mr. Augustus Hemenway, toward repairs in exhibition halls	244.83
Dr. Charles Peabody, toward exploration in the Delaware Valley	200.00
A Friend, annual gift for explorations	100.00
Mr. Clarence B. Moore, annual gift for explorations . . .	500.00
A Friend, for salary of temporary assistant	100.00
A Friend, for the purchase of a collection	500.00
A Friend, for the purchase of a collection	5500.00
	<hr/>
	\$8090.83

The income of the Huntington Frothingham Wolcott Fund was used for the purchase of collections from British Guiana, Africa, Pacific Islands, and North America, thus adding many valuable specimens to the Museum.

The income of the Henry C. Warren Fund for Exploration was used for explorations in the Delaware Valley, in Ohio, in Iowa, and in New Brunswick. We were thus able to carry on the exploration of several archaeological sites, which is in accordance with Mr. Warren's expressed wish previous to specifying the bequest in his will.

A portion of the income of the Mary Hemenway Fund is applied to the Hemenway Assistant in Archaeology. The balance of this income can be appropriated for archaeological explorations, for obtaining archaeological collections, or for work on such collections.

The accessions to the Museum by gift, purchase, and exploration have been of unusual number and importance during the year, but only those received as gifts from friends are here mentioned:—

By a bequest we have received, from the estate of the late Dana Estes of Brookline, a large collection of prehistoric objects in pottery, bronze, iron, and bone. The collection was formed during the exploration, under Mr. Estes' supervision, in 1884 and 1885, of a series of tombs near Belluno, Italy. It contains many personal ornaments, weapons, implements, and vessels of bronze, and is particularly rich in fibulae of several forms. Mr. Charles P. Bowditch has presented the Museum with the complete paraphernalia for a Javanese shadow play, also a collection of cloth illustrating the methods of printing and dyeing textiles by wax painting among the Javanese, a collection of pottery and baskets from Java, baskets from Borneo, Luzon, and Ceylon, charms from Japan, and photographs of stone carvings and ruined buildings in India. Mr. Lewis H. Farlow has given an unusually fine collection of baskets, implements, utensils, clothing, personal ornaments, and ceremonial objects, from the Shasta, Karok, Yurok, Cayuse, Wasco, Clatsop, Skokomish, Yuki, Hupa, Sac and Fox, and Blackfoot Indians. Many of these specimens are of great scientific value and cannot be duplicated. Mr. Oric Bates collected and presented to the Museum 109 crania from a cemetery of plundered rock-cut tombs at Siwa, the ancient Ammonium in the Libyan Desert, northern Africa. The date of these tombs is approximately 400 B.C. to 100 B.C. The burials

may in some cases be intrusive and as late as Roman times. They are all, however, pre-Islamic. From Professor Arlo Bates we have received two crania from the shell-heaps at North Haven, Maine: one of these shows a perforated palate and is the only instance we have of a "hair-lip" among the crania of North American Indians; from Mr. Clarence L. Hay, stone carvings, pottery, and shell objects from Mexico, and a Quechua loom from Cuzco, Peru; from Professor T. A. Jaggar, Jr., several Aleutian baskets and basket material, wallets, mats, and sea-otter darts, also photographs of the native people of the Aleutian Islands, collected by him in 1907; from Dr. William McM. Woodworth, a large collection of ethnological specimens from the Northwest coast and the Pueblo region, also from northern Africa and the Pacific Islands; from Mr. Edward Thompson, a nearly complete costume of a Mixteco Indian woman, and yucca fibre carrying bags from the same people; from Miss Grace Nicholson, a model of a tule rush canoe of the Pomo Indians of California, and 106 photographs of the various northern California Indians visited by her the past summer; from Professor J. B. Woodworth, quarry material from chert beds at the head of Spring Cañon, near Virginia City, Montana; from Dr. John C. Phillips, a painting of a buffalo hunt on deer skin by a Sioux Indian, also an Eskimo child's suit from Greenland; from Mr. A. V. Kidder, metate and axe from the ruins at Rito de los Frigoles, New Mexico, two old Navajo blankets, two very old birchbark buckets from a rock-shelter at Grand Sable, a stone maul from Isle Royal, Michigan, a grooved axe from New Mexico, and a bowl from Santa Clara, New Mexico; from Mr. Louis Cabot, through Dr. Bigelow, a soapstone pot from Iredell Co., North Carolina; from Mr. Henry E. Cornell, a Chukchi mat of skin with applied figures; from Miss Mary Brooks of Gloucester, a cranium with a metopic suture, from a cave in Tarmatambo, Peru; from Dr. Charles G. Weld, a Peruvian mummy, gourd cups, small stone effigies, and textile fabrics, from Peruvian graves; from Mr. Alanson Skinner, copper spear point from Menominee reservation, Wisconsin; from the estate of Dr. Weld, through Dr. Thomas Barbour, 31 large photographs of natives of New Zealand, New Guinea, and New Hebrides; from Mr. Harrison W. Smith, bow and six arrows from Ceram Island, Molucca group; from Mr. Clarence B. Moore, pottery from mounds in the Mississippi valley; from Mrs. W. H. Wightman, a stone hammer from northern Ireland; from Mr.

H. J. Winn, 32 Addis gallery photographs of Indians; from the Duke of Loubat, four bronze medals.

Assistant Professor Dixon was given leave of absence for the last half of the year in order to prepare the report on the Indian Tribes of the United States for the Census Bureau.

Dr. Charles Peabody, Assistant in European Archaeology, was in Europe during several months. He represented the Museum at the Congrès Préhistorique de France, and visited several archaeological sites, where he secured a number of specimens for the Museum.

Mr. A. V. Kidder, Austin Teaching Fellow, was in New Mexico during the winter continuing his study of the ancient pottery from the Pueblos.

It will be recalled that, in 1897, Miss Phoebe Ferris bequeathed to the Museum the land occupied by an Indian cemetery. This is the site where, with the assistance of Dr. C. L. Metz, I began to explore in 1881. Since that time parties from the Museum have from time to time been engaged in its exploration, and it has been a training place in field work for a number of the graduate students in the Department. During the present season this exploration has been completed by Mr. Bruce W. Merwin. The large amount of material obtained during all these years is being studied by Mr. R. E. Merwin who has taken a prominent part in the explorations. The land which belongs to the Museum can now be made into a public park for the city of Madisonville, Ohio, under such conditions as the University may determine in accordance with Miss Ferris' bequest.

Miss Alice C. Fletcher, the holder of the Thaw Fellowship, has completed her report on the Omaha tribe. This embodies the results of her long continued research on the history, life, ceremonies, customs and arts of the Omahas. By an agreement with the Museum this important volume is issued in the series of reports of the Bureau of Ethnology.

The close association of the teachers in the Division of Anthropology with the Museum, of which they are officers, keeps the instruction in anthropology closely connected with the work of the Museum as established on the foundation of the Division under the Faculty of Arts and Sciences. The Museum and its library are thus essential to the Division.

In May last, the Association of American Museums held one day's session of the Boston Meeting in Cambridge. The Museum was visited by the officers of many museums in this country

and our methods were studied by those interested in museum technique.

The Visiting Committee appointed by the Board of Overseers held a meeting in the Museum, on January 12, for the purpose of discussing the possibility of completing the south wing of the University Museum in order to give to the anthropological section the much needed additional room and extended facilities. After a consideration of the plans, which had been prepared under my direction, for closing the gap between our present building and the southwestern corner of the Oxford Street façade, the Committee discussed the form of a report to the Board of Overseers. It was decided that such a report should present the scope, importance, and value of the Museum in its various lines of activity with a statement of its financial condition, and should be accompanied by an appeal to the Overseers on the part of the Committee for the completion of the building at an estimated cost of \$125,000. This report was prepared and signed by the twelve members of the Committee, all of whom are graduates of the University. It was presented by the Chairman, Mr. Markham, at the meeting of the Overseers on April 12, 1911.

F. W. PUTNAM,
Honorary Curator of the Museum.

THE SEMITIC MUSEUM

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — The year 1910–11 has seen several changes in the personnel of the Semitic Department. Professor George F. Moore has withdrawn, in order to devote his teaching entirely to the Department of the History of Religions. Dr. William R. P. Davey has accepted an appointment in Syracuse University. Professor James Richard Jewett, who graduated at Harvard in 1884, has come to us as Professor of Arabic, after long service in Brown, Minnesota, and Chicago Universities.

The Semitic Museum has been enriched during the year by the addition of several hundred specimens. Among these are a collection of eleven Babylonian-Assyrian stone cylinder seals, and a collection of eight hundred and twenty cuneiform tablets from Babylonia. Most of the tablets date from the early Babylonian period, and relate to matters of business, religion, and private and social transactions. We have also received from Jerusalem specimens of eighty-six varieties of the trees and shrubs of Palestine. These are the first instalment of a collection which F. Vester and Co. of Jerusalem have been engaged for several years in gathering for our Museum. Each variety is represented by two specimens, one giving a cross section, and one a longitudinal cut showing the grain of the wood. These specimens of wood have been placed on exhibition in one of the table cases of the Palestinian room.

In the previous report the expectation was held out that a full account of the work of excavation done at Samaria in 1908–10 might be published during the year 1911. It is now clear that this expectation cannot be realized, because the explorers have had other engagements which made heavy demands on their time. It is hoped that the publication of the report may not be long delayed. Its appearance is eagerly awaited by scholars, and ought to arouse such general interest as shall provide the means for a resumption of the work of excavation. The Israelite palaces and the Hebrew writings found at Samaria are unique, and justify the hope of still greater surprises for the explorer.

The amount of publication of a Semitic nature now provided for suggests that the time has come for the projection of a series of occasional volumes, to be issued by the Semitic Department. In such a series the account of the work at Samaria naturally belongs, as does also a volume which has been prepared by Dr. Mary I. Hussey on the early Babylonian tablets belonging to the Museum. The means to publish these two works have been provided by the generosity of Mr. Jacob H. Schiff, Chairman of the Committee to visit the Semitic Department. Before coming to us Professor Jewett was engaged in preliminary arrangements looking to the publication of a series of Arabic volumes. These also might form part of the Harvard Semitic series. The cuneiform tablets, Babylonian-Assyrian seals, pottery from Palestine, and Arabic and Syriac manuscripts would furnish material for additional volumes.

DAVID G. LYON, *Curator*.

THE FOGG ART MUSEUM

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — I have the honor to present the following report on the Fogg Art Museum for the year 1910–11.

The Fogg Museum has received by gift the following additions to its permanent collections of works of art: two water color drawings by John Ruskin — Convent and Alpine Pass, and Pass of Faido — presented by friends and pupils of Professor Charles H. Moore, the first Director of the Fogg Museum, in recognition of his devoted service to the Museum and to the University; from the French government, eight pieces of Sèvres porcelain, which were presented to Harvard University and placed in the Fogg Museum; a Japanese painting by an early Ukiyoe master, a Japanese book of songs, fourteen Japanese prints, some Italian bobbin lace, and seventeen ancient gems, from Mr. Owen Bryant, '04; Chinese porcelains, consisting of three tall jars, two tall beaker-shaped vases, and three large bottles, from Mrs. W. Wheeler Smith of New York; and from Mr. James Loeb, '88, thirty-six plaster casts of Arretine moulds and fragments to replace some of the original pieces which, together with his collection of vases and bronzes, Mr. Loeb removed to his home in Munich.

A Venetian painting representing the Holy Family, attributed to Bonifazio, was bought from the income of the Randall fund with the help of gifts from Dr. Denman W. Ross, '75, and Mr. Charles C. Walker, '92.

To the print collection an unusually large number of additions have been made. The Museum Collection has acquired by gift from Mr. Paul J. Sachs, '00, Rembrandt's Great Jewish Bride, the Shepherdess Knitting by Millet, sixty-one etchings by Jacquemart, and fifty-one etchings by Herman A. Webster; from an anonymous giver, the Furnace Nocturne, an etching by Whistler; from Mr. Francis Bullard, '86, a third state of the Clyde from Turner's *Liber Studiorum*, and Lupton's copy of the Mill near the Grand Chartreuse, from the same series; and from Mr. James C. Smillie, thirteen etchings by his father, James D. Smillie. The Nocturne, a lithotint by Whistler, was purchased from the income of the Gray fund.

The Museum has added 541 photographs and 507 slides to its collections. To its library 61 volumes have been added, of which 24 were gifts. The most notable purchases were the *L'Oeuvre gravé de Rembrandt* by Rovinski, and the first two volumes of Max Lehrs' *Geschichte und kritischer Katalog des deutschen, niederlandischen und französischen Kupferstichs im XV. Jahrhundert*. Both these books are scarce and valuable, and important for the student. Their purchase was made possible by the fact that there was at this time an accumulated income in the Searle fund, from which our books are purchased. The remaining acquisitions include 18 gallery catalogues, and 11 volumes for students' use.

The Fogg Museum has received as an indefinite loan a painting of S. Fabian, Pope, attributed to Antoniazzo Romano, and a small pinnacle from an altarpiece with S. Agnes and the lamb, attributed to Ambrogio Lorenzetti, one of the important early Sienese masters; as a temporary loan, a tondo attributed to Raffaellino del Garbo, and a Madonna adoring the Child, from Mr. Harold W. Pearsall. Several of the Italian paintings mentioned in the last report, which were lent by Mr. and Mrs. C. B. Perkins and the Misses Norton, remained in the Museum through this year also. The Misses Norton lent, in addition, a water color drawing of Scott's house in Edinburgh, by J. M. W. Turner. Mr. Owen Bryant, '04, lent five Japanese prints; Mr. Richard Norton, '92, two moulds from Tripoli; and Mr. Edward W. Forbes, '95, two water color drawings of Greek marbles in Athens, by Mr. Joseph Lindon Smith, and a Spanish Gothic chest of the fifteenth century.

The principal special exhibition of the year was of works of Degas, this being the first exhibition of his paintings ever held in Boston. Mr. Alfred Atmore Pope of Farmington, Conn., lent three remarkable paintings; Mr. Harris Whittemore of Naugatuck, Conn., one of Degas' most important and beautiful works; Messrs. Durand-Ruel of New York, two oils and a pastel; Mr. Frank Gair Macomber of Boston, an oil and a pastel; and the Museum of Fine Arts, Boston, an oil, two pastels, and also reproductions of drawings and photographs of paintings and pastels by Degas, which were shown in the print room. This exhibition attracted a total of 2,551 visitors during the ten days it was held, the attendance ranging from 64 on the first day to 533 on the last. It was the most popular special exhibition the Fogg Museum has had. A catalogue of the exhibition, with an

introduction by Professor Arthur Pope, was prepared for free distribution.

The Degas exhibition was followed by one of facsimile photographs in color of early Flemish paintings, which were loaned by the College Library for the purpose.

The Rembrandt exhibition in the print room was replaced by an exhibition of modern etchings, including, besides prints already belonging to the Museum, some of those by Jacquemart and Webster given by Mr. Sachs, and works of Meryon, Whistler, Haden, Lalanne, Lepère, Palmer, Bone, Zorn, and others, lent by Mr. Bullard.

During the year the Fogg Collection, with the exception of the paintings, was catalogued. 761 engravings were catalogued and lists were made of the plates represented in the collection by series of states, and of those of which there are duplicate states in the Museum.

Engravings and photographs were mounted for other departments of the University and for a few outsiders. For this work the Fogg Museum received \$38.97. The receipts from the sales of photographs, post-cards, and catalogues have amounted to \$22.70.

In the photograph department 507 slides and 1,532 photographs were catalogued, and in addition, about 450 photographs, mainly of Italian painting, were recatalogued with changed attributions. The table adjoined shows the growth and record of the photograph and slide collections for a succession of years: —

	1906-6	1906-7	1907-8	1908-9	1909-10	1910-11
Photos received during year	2,076	670	1,926	525	859	541
Photos catalogued during year	1,250	1,276	1,481	693	2,525	1,532
Photos remaining uncatalogued	2,262	2,932	3,551	3,372	1,696	647
Total number accessions	35,144	36,420	37,901	38,595	41,129	42,661
Total number in Museum	37,406	39,352	41,452	41,967	42,825	43,306
Slides catalogued	67	84	98	52	472	507
Total number in Museum	3,570	3,654	3,752	3,804	4,276	4,783

About a year and a half ago, a standard size of photograph mount, 14x18 inches, was adopted, that previously used having been 13½x21½ inches. The task of cutting down the mounts of approximately 40,000 photographs from 21½ to 18 inches in height was then begun. This involved also the rewriting of cata-

logue numbers on each mount. The work was nearly completed on the first of September, to the general satisfaction of users of the photographs.

Photographs were lent 133 times, and slides 220 times, chiefly to members and departments of the University and to Radcliffe College.

The number of registered visits for the study of photographs was 972; of these 925 were by members of the University and 47 by outsiders.

The total number of visits made to the print room for purposes of study was 287. Of these 195 were by members of the University and Radcliffe College.

Since the Fogg Museum was built in 1895 the conditions have changed. It contains now a valuable and growing collection of original paintings, which cannot be displayed properly in the present gallery. Better lighting of the gallery is needed, and additional space for exhibition. Members of the Fine Arts Department are anxious to have a room in the Fogg Museum where the drawing classes may be conducted. The Fogg lecture room is too large and the little lecture room too small for most of the Fine Arts courses which are given in them. The members of the Fine Arts Department are now engaged in planning how best the needs of the Museum and the Department may be filled by certain changes in the present building and the addition of a wing. It is expected that the plans will mature soon, and it is greatly to be desired that means of procuring the necessary money for these changes will be found. Moreover, additional funds are needed for the purchase of works of art. Those applicable to that purpose are so small that it is very difficult for the Museum to grow as fast as it ought to grow, although opportunities to buy important works of art frequently come.

EDWARD W. FORBES, *Director*.

THE GERMANIC MUSEUM

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — The academic year 1910–11 marks a decided advance in the Germanic Museum cause and has raised new hopes for the future.

The most important event of the year was the decision reached in regard to the architect of the new building. It was Mr. Busch's desire that the new building should be a characteristic specimen of German architecture and that it should therefore be designed by a leading architect in Germany. Through the kind intercession of Geheimrat Schmidt, of the Prussian Ministry of Education, who has done so much to facilitate the interchange of professors between Harvard and Berlin, we succeeded in obtaining the services of Professor German Bestelmeyer of Dresden, one of the foremost architects of contemporary Germany, whose recently completed Central Hall of the new University buildings at Munich is an undoubted work of genius and justly enjoys a more than national reputation.

Professor Bestelmeyer, entering upon his task with earnest enthusiasm and rare insight, has produced a plan remarkably consistent and simple and at the same time strikingly original. The Corporation at once accepted it and have authorized him to proceed with elaborating the working plans and specifications. In this Professor Bestelmeyer will be assisted by our own Professor H. Langford Warren, who all along has taken a keen interest in the Germanic Museum and to whose intelligent and expert advice we owe much. In the absence of Professor Bestelmeyer, the supervision of the construction of the building itself is to be committed to Professor Warren's firm (Warren & Smith).

The site generously accorded to us by the Corporation is the corner lot between Frisbie Place, Kirkland Street, and Divinity Avenue, opposite Randall Hall. It is one of the finest sites in all Cambridge, and affords the architect ample scope for monumental and pleasing effects,—an opportunity of which Professor Bestelmeyer has skilfully availed himself.

The whole building embraces an oblong rectangular space of about 130 feet on Kirkland Street and about 200 feet on Divinity

Avenue and Frisbie Place. But the Museum proper consists of two wings of unequal length, placed at right angles to each other, the longer one facing Divinity Avenue, the shorter one stretching from Divinity Avenue to Frisbie Place, parallel with Kirkland Street, but set back from it some 100 feet. The space between the two wings is conceived of as an ornamental court, with shrubs, statuary, and water-basins, connected with the Museum itself by cloister-like arcades running along Kirkland Street and Frisbie Place. A massive tower rising at the point of junction of the two main wings holds the various parts of the design firmly together. It is an interesting illustration of the catholicity of Harvard taste, that at the same time that modern French architecture has come to be so happily represented at Cambridge in the person of Professor Duquesne, there should arise here a German building thoroughly characteristic of the best in modern German art, full of originality and power and at the same time harmonious, measured, and restrained.

The exact date when ground will be broken for the new building has not yet been settled. Meanwhile, it is gratifying to note that gifts both of money and of objects for the rounding out of our collection continue to come to us.

Mr. Otto H. Kahn of New York has given the sum of \$1,000 for the purchase of reproductions of German sculptures, preferably to be used toward the acquisition of a bronze copy of Rietschel's Goethe-Schiller monument at Weimar.

His Highness, Johann Albrecht, Duke of Mecklenburg and Prince-Regent of Brunswick, has signified his intention of giving a bronze copy of the Brunswick Lion, the bronze monument erected in 1166 by Duke Henry the Lion of Saxony in front of Brunswick Castle as a symbol of his territorial sovereignty. This interesting specimen of German Romanesque metal work will be placed in the court in front of the new Museum building and will add much to the mediaeval effect of the south façade.

Professor Hugo Lederer of Berlin has given a cast of his colossal statue of "The Fighter," recently exhibited at the Paris Salon. This remarkable work of one of the foremost sculptors of contemporary Germany has provisionally been placed in our present building and forms a welcome counterpart to "The Fencer" by the same master, already in our possession.

The Provincial Government of Rhenish Prussia has notified the Curator that it is preparing for the Museum a collection of casts of monumental and architectural sculpture of the Rhineland

from the Romanesque period to the Renaissance. This collection will embrace among other objects a Romanesque portal of Trèves Cathedral, the main portal of the Church of our Lady at Andernach, reliefs from the Tympanon of the Church of our Lady at Trèves, choir-stalls from St. Gereon at Cologne, the Visitation group from Xanten, and a number of monumental tombs from various Rhenish churches.

Finally, the Society of Arts and Crafts of the Rhineland and Westphalia announces that it is preparing a similar gift representing the development of the industrial arts in western Germany in the Middle Ages and the Renaissance. Both collections together will contain about twenty large and some forty smaller objects.

These two collections are being prepared under the supervision of Professor Paul Clemen of Bonn University, German Visiting Professor at Harvard in 1907-08, at whose suggestion both gifts were made. They are therefore a direct outcome of the interchange of professors between Germany and Harvard University, which in its turn had its first inception from the Museum propaganda.

KUNO FRANCKE, *Curator*.

PUBLICATION OFFICE

TO THE PRESIDENT OF THE UNIVERSITY: —

SIR, — I have the honor to submit my report for the academic year 1910-11.

During this year the Publication Office has been particularly busy.

In the printing department more than 1700 pieces of work were handled, including the Annual Catalogue, the President's Report, and the University Directory, and representing a business of more than \$56,000. During the year a new press has been installed and an addition made to our monotype equipment. Every foot of available space in University Hall is now in use, but the office is still unable to do more than a portion of the printing which the various needs of the University require.

In addition to its work as a distributing centre for the official publications of the University the Publication Office has had charge of the mailing of the *Harvard Theological Review* and the *Quarterly Journal of Economics*, and the publishing of several books and periodicals.

The following publications were issued during the year: —

A Guide to Reading in Social Ethics.
Harvard University Directory, 1910.
Banking Reform in the United States. By O. M. W. Sprague.
Applied Ethics. By Theodore Roosevelt.
Railway Rate Theories of the Interstate Commerce Commission.
By M. B. Hammond of Ohio State University.
A Laboratory Course in Physiology. By W. B. Cannon.
Harvard Theological Review. Vol. 4.
Harvard Studies in Classical Philology. Vol. 22.
Quarterly Journal of Economics. Vol. 25.
Annals of Mathematics. Vol. 12.
Annals of the Astronomical Observatory. Vol. 56, Pt. 5; Vol. 59,
Pts. 6 and 7; Vol. 64, Pt. 7; Vol. 65; Vol. 66; Vol. 68, Pt. 2.

The following books are in press: —

Manual for Northern Woodsmen. By Austin Cary. Third edition.
The British Postoffice. By J. C. Hemmeon of McGill University.

The demand for these publications has been encouraging, the University Directory in particular having had a very wide sale. The receipts up to date on the latter book amount to more than

\$12,500, and several hundred copies have been sold and not yet paid for. Leaving out of consideration the receipts on the Directory account, the total sales of publications for the year amounted to more than \$11,000.

I should like again to call your attention to the need of more adequate publication facilities. Works of high scholarship are being prepared by members of the University, and because of our lack of publication funds and our inadequate equipment many of these books are never issued or are sent to other presses. The loss to scholarship as well as to the prestige of the University is real. To quote from the *Harvard Alumni Bulletin*: "Only last year an historical treatise of great importance, written by a Harvard master of arts, now a member of the Faculty of Arts and Sciences, was given to the press of a sister institution for publication." And although the University has the largest Sanskrit publication fund of any institution in this country, it has no facilities for printing a Sanskrit book.

Volumes that are commercially profitable can usually find a publisher, but the test of a book's merit is not always its salability, and if the University's reputation for productive scholarship is to be maintained a subsidized institution is needed for the publication of books that can never pay in dollars and cents.

That this is becoming generally recognized is evidenced by the recent establishment of presses at several American universities. No one of these is comparable with the presses at Oxford or at Cambridge, England, and in that fact, it seems to me, lies the opportunity for this University. There is a very definite need in this country for a learned press where large fonts of type of Arabic, Hebrew, Sanskrit, Russian, and other tongues might be found, where compositors skilled in setting foreign languages and mathematical formulae might be gathered, and where work of scholarly accuracy might be executed. The first press of adequate scope to be established in the United States will draw to it, from all parts of the country, learned work which is now sent abroad, and Harvard University has still the chance to establish such an institution. The opportunity is not one that can be postponed, however, for the need is so well recognized and the advantages to be derived are so considerable that within the next few years some university is sure to take advantage of the situation.

C. CHESTER LANE,

Publication Agent.

UNIVERSITY EXTENSION

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—The following report covers the work of University Extension for the academic year 1910–11, including the Summer School of Arts and Sciences for 1911.

I. THE SUMMER SCHOOL OF ARTS AND SCIENCES

The general courses of the Summer School were given by twenty-eight officers of the Faculty of Arts and Sciences, including one lecturer, eight assistant professors, fifteen instructors, three assistants, one Austin Teaching Fellow, together with four professors and one assistant professor from other institutions, and four gentlemen not at present holding any academic position. Eight persons were employed as assistants in these courses. In addition, two Harvard professors offered research courses for which no student applied. As usual, besides the general courses, the Physical Education courses were given by the Director of the Hemenway Gymnasium with a large staff of lecturers, instructors, and assistants, and the courses in Surveying and Mechanics were given at the Engineering Camp.

Certain courses given in previous years, but taken by a very small number of students, were omitted in 1911. The most noteworthy addition to the list was the course on Vocational Guidance, given by Mr. Meyer Bloomfield, '01, Director of the Vocation Bureau of Boston, and taken by forty-two students. This course, which the School owed to the generosity of Mr. Bloomfield and the Executive Board of the Vocation Bureau, is the first attempt to give systematic instruction at a university in this newly-developed and useful field of the teacher's work. It is hoped that the course, which attracted attention throughout the country, can be again offered in an enlarged form in the coming summer.

The School also had the advantage of a course of six lectures on the "Massachusetts Idea of Vocational Education," arranged by the State Board of Education of the Commonwealth, and

given by the Commissioner of Education and by other officers of the Board and of industrial and agricultural schools in Massachusetts. It is hoped that this may be the beginning of permanent close coöperation between the Summer School and public educational authorities in furthering the interest of teachers.

The number of persons in attendance at the School was as follows:—

	1909	1910	1911
Total number of students	933	873	787
“ “ “ men	468	476	400
“ “ “ women	465	397	387
Percentage of men	47%	54.5%	51%

This body of students was made up as follows:—

	1909	1910	1911
Students at Engineering Camp ¹	12	31	19
Harvard students of preceding academic year: ²			
Members of graduate and professional schools	17	19	10
Undergraduates in good standing	46	61	43
Undergraduates with deficient record	42	57	35
Radcliffe students of preceding academic year	7	11	6
Students in physical education courses	160	170	186
Students from outside in general courses	653	528	492
	937	877	791
Names counted twice	4	4	4
	933	873	787

As the above figures show, the diminution in numbers was due largely to the falling off of Harvard students. This was partly occasioned by the rule, made this year for the first time, that students who have failed in college work will be admitted, for the purpose of making up failure, to three courses only,—Trigonometry, German, and French. These courses were especially planned to be of a disciplinary character, and the rule was strictly enforced, with a result entirely satisfactory.

The composition of the group entitled “Students from outside in general courses” was as follows:—

¹ Not including Engineering Camp students who were at the time members of Harvard University.

² Not including Harvard students in shopwork courses.

	1909	1910	1911
Teachers and school officers:			
Professors and college instructors	52	40	40
Normal school teachers	16	14	5
High school teachers	121	98	94
Grade school teachers	63	100	75
Endowed and private school teachers	64	54	52
Other teachers	86	34	38
Superintendents, supervisors, and principals	59	55	50
Total, teachers and school officers	461	395	354
Men	163	162	135
Women	298	233	219
Percentage of men	35%	40%	38%
	1909	1910	1911
Students from other colleges	48	39	27
Students from preparatory schools	2	7	5
Other students	47	21	11
Other occupation than teaching	33	34	45
Occupation not given	62	32	50
	192	133	138
	461	395	354
Total, students from outside taking General Courses	653	528	492
Men	261	243	209
Women	392	285	283
Percentage of men	40%	46%	42.5%

In this body of students from outside there were:—

	1909	1910	1911
Holders of A.B. or S.B. or some equivalent degree	173	148	170
Holders of a higher degree	71	57	48
Members of the Summer School in one of preceding five years	146	99	136

The geographical distribution of this same group was as follows:—

	1909	1910	1911
New England States	327	257	261
Middle States	157	124	94
South Atlantic States	57	26	36
South Central States	19	26	26
North Central States	66	72	52
Western States	6	5	5
Foreign countries	21	18	18
	653	528	492

The Harvard Summer School not only aims to maintain an exacting standard of work, but its methods are peculiar in two respects. First, under the arrangement of our instruction a student, in order to get any "credit" at all, must complete the full equivalent of one half-course. In consequence, he has as a rule no time to pursue seriously more than one subject in the six weeks. The majority of teachers who undertake summer study prefer to take more than one subject, hearing several lectures a day but giving less time to private study in each course. Moreover, if they are working for a degree, they are also eager to secure the greater amount of "credit" usually to be secured under that plan. The second peculiarity of Harvard is that the University does not grant the degree of A.M. on the ground of summer study alone. Hence the numerous college graduates who wish to earn that degree by studying for a series of summer vacations do not find at Harvard what they want, unless, in exceptional cases, they choose to take a Harvard course in preparation for a degree from another university.

It is thus manifest that the number of persons whose needs are met by the Harvard Summer School is limited. Nevertheless, in both these policies the Harvard position is sound, and the service to the country rendered by the University in maintaining the distinctive character of our summer work and of our Master's degree far outweighs the repute which greater size would bring us. There is no reason to doubt that much greater numbers could be secured by a different policy in these two respects, but no one who has observed how even some intelligent and very earnest school teachers gain here a new conception of what study is, will wish to make a radical change in our methods of teaching, while the high standard of our Master's degree is its prime attraction.

It seems likely that by great care and economy the Summer School can be maintained on this basis without serious annual expense to the University. The quality of the students is excellent, and the testimony of both students and instructors leaves no doubt that the work of our six-week courses is the full equivalent of a half-course in term time.

In any case, the chief constituency of the Summer School must be sought among teachers and other mature persons, and among students who either (as in the case of prospective medical students taking chemistry) require certain special subjects for professional purposes or else have definite aims of general culture. The use

of the Summer School by undergraduates making up failures, and by undergraduates merely wishing to score summer credit in order to shorten their college course, was not a part of the original purpose of the School, and is a purely incidental and somewhat dangerous function of its present activity.

The courses in Physical Education at the Hemenway Gymnasium have been conducted by Dr. Dudley A. Sargent since 1887, and are intended to train directors of gymnasiums and of physical education in colleges and schools. The number of students taking them has grown in a remarkable way, and the proportion of men among the students has also shown a gratifying increase in recent years.

Year	Students	Percent. of Men	Year	Students	Percent. of Men
1887	57	32	1900	119	29
1888	45	38	1901	111	32
1889	59	37	1902	130	31
1890	83	30	1903	165	26
1891	95	36	1904	134	25
1892	111	33	1905	150	24
1893	56	39	1906	127	28
1894	77	40	1907	125	32
1895	90	39	1908	158	39
1896	104	37	1909	180	37.5
1897	124	26	1910	170	39
1898	84	19	1911	186	45
1899	72	39			

The deficit on the Summer School account for the fiscal year 1910-11 (being a part of the deficit made by the Summer School of 1910) amounted to \$4,213.27, and was charged to the College Account.

The account of the General Courses of the Summer School for 1911 (of which the expenses necessarily fell in two fiscal years) shows, as given below, a deficit of about \$500.00, which was met from the surplus earned by the courses in Physical Education.

GENERAL COURSES

	<i>Income</i>	
	1910	1911
Registration fees	\$1,614.00	\$2,232.00
Tuition fees (not including Phys. Educ.)	15,196.67	13,805.00
Auditors' fees	850.00	930.00
Stated contribution from Phys. Educ.	250.00	250.00
Gifts for special objects	—	320.00
	<hr/>	<hr/>
	\$17,910.67	\$17,537.00
Deficit	5,467.20	494.14
	<hr/>	<hr/>
	\$23,377.87	\$18,031.14

Expenses

Salaries and grants for instruction	\$16,584.00	\$12,080.00
Public exercises and hospitality	1,016.21	761.76
General expenses	344.55	414.21
Expenses for Shopwork courses	176.00	528.00
Administration and office expenses	2,197.02	2,159.03
Advertising and circulars	1,989.93	1,103.21
Postage	289.19	231.02
Tuition fees remitted	100.00	135.00
University Charge:		
Bursar's Office	180.57	382.00
Publication Office	285.93	236.91
Annual Catalogue	214.47	—
	<hr/>	<hr/>
	\$23,377.87	\$18,031.14

PHYSICAL EDUCATION COURSES

Fees for tuition	\$6,250.00	\$6,900.00
Salaries and expenses	5,804.65	5,130.48
	<hr/>	<hr/>
Surplus	\$445.35	\$1,769.52

II. COMMISSION ON EXTENSION COURSES

The Commission on Extension Courses consists of representatives of the following institutions: —

Harvard University	Boston University
Tufts College	Museum of Fine Arts
Mass. Institute of Technology	Wellesley College
Boston College	Simmons College

Since the general administrative services for the courses of the Commission were provided by Harvard, it is proper here to make record of the work of the Commission for 1910-11. The following table exhibits the courses, the number of students in each, and the number of certificates granted to students who completed the courses. The number of certificates earned was about 46 per cent of the whole enrolment.

	Enrolment	Certificates
English Literature and Composition (Professors Copeland and Greenough and Mr. Hersey of Harvard)	258	64
Experimental Electricity (Professor Derr of Institute of Technology)	27	11
Elementary Economics (Professor Metcalf of Tufts)	116	64
Psychology (Professor Yerkes of Harvard)	20	7
Advanced English Composition (Professor Sharp of Boston University)	82	27
History of English Literature (Professor Black of Boston University)	80	46
German Literature (Professor Perrin of Boston University) .	18	10
Elementary French (Professor Geddes of Boston Univ.) . .	23	8
French Literature (Professor Colin of Wellesley)	13	5
Physics (Professor Kent of Boston University)	12	9
Ancient Art and Civilisation (Dr. Fairbanks of Museum of Fine Arts)	29	13
Roman, Byzantine, and Gothic Art (Professor Sumner of Institute of Technology)	21	9
Dynamical and Structural Geology (Professor Barton of Teachers' School of Science)	23	15
Mineralogy (Professor Barton of Teachers' School of Science)	23	14
Physical Geography (Professor Johnson of Harvard)	74	69
Physiological Botany (Professor Osterhout of Harvard) . .	44	24
	<hr/> 863	<hr/> 395

The students in these courses are not members of, nor even directly affiliated to, Harvard University, but the courses authorized by the Commission, having been approved by the Harvard Administrative Board for University Extension, were accepted by the Faculty of Arts and Sciences (on recommendation of the Faculty's committee on instruction) to be counted toward the degree of Associate in Arts. Each course counts as a full-course, a two-thirds course, a half-course, or a quarter-course, according to the amount of work required. All the courses given by the Commission in 1910-11 were also accepted for the degree of A.A. by the Faculties of Tufts College and Wellesley College.

The Boston School Committee has accepted the degree of A.A. from Harvard, Radcliffe, Tufts, and Wellesley as the equivalent of the A.B. in establishing the qualifications of teachers, so that the courses of the Commission are now fully available for the purposes of Boston school-teachers. A large number of teachers have availed themselves of this opportunity by taking these courses. This is probably one reason why but a small number of Boston teachers take courses in the Harvard Summer School.

The experience of the first year of the Commission's work gives confidence that the general plan which has been followed is suited to the end in view, and that the lines laid down can be pursued in the further development of University Extension in Boston.

The financial statement of the Commission's courses is as follows:—

Expenses

Salaries	\$12,224.50	
Lecture-room expenses	604.41	
Advertising	117.60	
Printing	423.94	
Postage	188.35	
Office and clerical expense	197.24	
Teachers' School of Sciences		
Expenses for equipment and administration	\$1,042.21	
Less gifts and minor income	197.47	844.74
		<hr/>
		\$14,600.78

Income

Fees	\$5,169.50
Lowell Institute	8,027.53
Chamber of Commerce subscription	1,403.75
	<hr/>
	\$14,600.78

For 1911-12 about the same number of courses have been provided, and the number of students is about twenty-five per cent greater than in 1910-11. More than one fifth of the persons taking courses this year were in last year's courses also. The valuable Courses for Teachers maintained by Boston University and the courses of the Commission supplement each other, and a full and gratifying coöperation is maintained between the two groups.

III. EXTENSION STUDENTS IN REGULAR COURSES

In 1910-11 five persons were registered as Extension Students of the University. Of these two were members of the School for Social Workers, and one was a student in the Episcopal Theological School.

In 1911-12 eleven persons are registered as Extension Students, of whom one is a member of the School for Social Workers, one each a student in the Episcopal Theological School, the New England Conservatory of Music, and Andover Theological Seminary. This class of Extension Students is understood to include non-graduates whose main occupation is not that of a Harvard student, but who wish to work in Harvard courses. They would formerly have been classed as Special Students in Harvard College; as Extension Students they are not members of Harvard College. The distinction has proved decidedly convenient, and makes it easier to render Harvard instruction available for a varied group of highly deserving non-graduate students who wish to take courses under the Faculty of Arts and Sciences.

JAMES HARDY ROPES, *Dean.*

RADCLIFFE COLLEGE

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—I have the honor to submit the report of Radcliffe College for the academic year 1910-11.

The number of students in actual attendance during the year was 500, as against 485 during the preceding year.

Graduate Students	71
Seniors	62
Juniors	74
Sophomores	61
Freshmen	106
Special Students	117
Unclassified Students	9
<hr/>	
Total	500

At Commencement in June, 1911, sixty-seven students, four of whom had completed their residence in an earlier year, received the degree of Bachelor of Arts. Three students who had not been registered as Seniors received the degree, and two students who had been so registered failed to receive it. Three of the sixty-seven received the degree *magna cum laude*; twenty-six received it *cum laude*.

Seventeen candidates received the degree of Master of Arts. Six of the seventeen had taken their first degree at Radcliffe; the others represented the following colleges: Mount Holyoke College (two); Wellesley College (two); Hollins College, Leland Stanford Jr. University, McGill University, Middlebury College, Newcomb College, Smith College, Vassar College (one each). Eight received the degree in English, four in History and Political Science, two in German, two in Philosophy, and one in Chemistry.

Three hundred and forty-three candidates presented themselves for admission. Twenty-one were candidates for admission as special students. Forty-six candidates took part of the examinations or worked off admission conditions. One hundred and sixty candidates took the preliminary examinations, and one hundred and sixteen the final examinations. Sixteen candidates who took wholly or in part the examinations of the College Entrance Examination Board are included in the foregoing classification; of these students two were admitted to the Fresh-

man class. The new plan for admission adopted by Harvard College in 1911 was tried by twenty-four admission candidates in June and September. Of these sixteen candidates passed successfully.

The results of the final examinations are given in the following table:—

	Admitted	Admitted clear	Rejected
June	65	38	13
September	29	5	5
	<hr/>	<hr/>	<hr/>
Total rejected	94	43	18
Candidates in June who did not reappear in September . . .	18		
	4		
	<hr/>		
	116		

The entering class of 1911-12 numbers ninety-three, who were admitted, eighty-three by examination in 1911, eight in 1910, and one in 1909, and one by the Committee on Admission from Other Colleges in 1911.

Seventy-one graduate students registered during the year 1910-11, forty-six of whom were from colleges other than Radcliffe. Twenty-nine students were admitted to thirteen whole courses, and twenty-nine students to fourteen half-courses, of the "Courses primarily for Graduates in Harvard University open to competent students of Radcliffe College."

The Caroline I. Wilby Prize was awarded to Ruth Holden, 1911, for a thesis entitled "Reduction and Reversion in the North American Salicales." The Captain Jonathan Fay Diploma and Scholarship were also awarded to Ruth Holden, 1911. The Fellowship of the Woman's Education Association of Boston was awarded for 1911-12 to Maud Elizabeth Temple, A.B. (Bryn Mawr) 1904, A.M. (*ibid.*) 1905, Radcliffe graduate student, 1909-10. The Craig Prize in Dramatic Composition was awarded in 1911 to Florence Agnes Lincoln, a special student in Radcliffe College. The Doctor's thesis written by Edith Nason Buckingham, A.B. 1902, Ph.D. 1910, "Division of Labor among Ants," was published as Radcliffe Monograph number 16.

The members of the Academic Board for 1910-11 were Professor Byerly (Chairman), and Professors E. L. Mark, S. M. Macvane, H. S. White, E. H. Hall, H. W. Snyth, A. A. Howard, G. L. Kittredge, C. H. Grandgent.

Mrs. Josiah Parsons Cooke, an Associate of Radcliffe College, died May 19, 1911. She was one of the earliest supporters of Radcliffe. Her long, faithful, and generous service to the College will never be forgotten. There have been three elections of new members to the Council during the year 1910-11: Mr. Frederick Perry Fish, an Associate since 1904, was elected for a term of seven years from 1909, to fill the vacancy caused by the resignation of Professor Ezra Ripley Thayer; Miss Anna Florena Wellington, of the Class of 1904, was elected for a term of seven years from 1908, to fill the vacancy in an elective office caused by the resignation of the first Dean and the appointment of the second; Professor Fred Norris Robinson was elected for a term of seven years from 1905, to fill the vacancy caused by the resignation from the Council of Professor William Watson Goodwin. Professor Goodwin's distinction as a scholar and teacher, and his large experience in the academic life of Harvard have made his services to the College both as instructor and as administrator of inestimable value. His continuance on the Board of Associates ensures for the College his uninterrupted interest in its welfare. Mrs. Frances Parkman was reelected member of the Council for seven years from 1911. Miss Harriet Dean Buckingham, of the class of 1895, was elected Secretary of the College in December, 1910. Miss Grace E. Machado resigned her position as Mistress of Grace Hopkinson Eliot Hall at the end of the year 1910-11. Miss Machado displayed marked capacity for executive work, and the power to create in the students a spirit of democracy and of loyalty to the College, in the opening years of the Hall. Miss Machado's position has been filled by Miss Elinor Mead Buckingham, of the Class of 1892.

In the beginning of the past academic year the Council definitely undertook to secure the money for a third hall of residence to be named Sarah Whitman Hall, in memory of Mrs. Henry Whitman. This hall seemed to them an imperative need, because further increase in the number of students from a distance was impracticable until more halls could be provided. At the beginning of the summer of 1911, although only a little less than half the required \$75,000 had been subscribed, it was decided to start the building in the hope that further contributions would be made later, and with the understanding that such part of the fund as was not secured by subscriptions should be made up from the general funds, and repaid gradually from the income of the hall. Sarah Whitman Hall is to stand in Walker Street, facing

the Radcliffe field. The architects are Messrs. Kilham and Hopkins.

The resources of the College have been strengthened during the year by a few important gifts of money. The Cambridge Latin School Club gave in May, 1911, \$2,500, which it had secured by long-continued effort, — one-half the sum necessary to endow a scholarship. A member of the Class of 1911 gave \$1,000 toward the fund for instruction. Toward this same fund for instruction, in which the Alumnae are seriously interested, the Class of 1896 made its fifteenth anniversary gift of \$400, and the Class of 1901 its decennial gift of \$1,000. The bequest of Mrs. Martha T. Fiske Collord, two hundred shares of the capital stock of the Standard Oil Company, was received October 19, 1910. By the terms of Mrs. Collord's will this bequest may be held as a trust fund to be known as the Fiske Fund, and the income may be applied to the general uses of the College until such time, if ever, as the College wishes to use the fund for the erection of a building, to be known as the Fiske Building. The Council determined to use the income of the fund for the salaries for instruction, and accordingly increased the salaries of full professors and of assistant professors in 1911-12, and thereafter, \$100 for each course. The will of Mrs. Rebecca A. Greene of Dartmouth provided that the College should receive, on the death of her husband, $\frac{1}{8}$ of her residuary estate. Since Mr. Greene's death in April, 1911, \$175,000 has been paid to the College on account of this bequest. The Council hopes to keep intact the greater part of these two bequests to enable Radcliffe "to pay for a reasonable share of the time of such eminent Harvard professors as are willing to teach women." The President has already expressed the belief that "the time will come when Radcliffe teaching is in no sense extra work," and that "the coming of such a time will benefit both Radcliffe College and Harvard College."

During the year the College came into possession of the house and 20,269 square feet of land at 61 Garden Street, adjoining the Radcliffe halls of residence, bequeathed by Mr. J. Rayner Edmands. It was found necessary to use the Edmands House in 1911-12 in order to give rooms to seven of the twenty-six students who could not be accommodated in the halls. The Greenleaf House, on the estate which was given to the College in 1905, by the generosity of two hundred friends of the College, has been restored to its original use as a dwelling house, and is now occupied by the Dean. The College purchased in 1911 two additional

pieces of property in the square bounded by Garden and Brattle Streets, Mason Street, and Appian Way,—the property at 77 Brattle Street, and that at 15 Appian Way,—thus enlarging the holdings of the College by 14,570 square feet.

Several bequests to the College, which have not yet been received, were announced during the year: Miss Alice M. Curtis left \$25,000 to found the Marion H. Curtis Scholarship or Scholarships; Mrs. Lydia Augusta Barnard, of Milton, \$30,000 to found the Anna Parsons Scholarships, \$75,000 for the erection of a dormitory to be known as James and Augusta Barnard Hall, the net income therefrom to be used for scholarships to be known as the James and Augusta Barnard Scholarships, and \$10,000 for the same scholarships, subject to certain life interests; Mr. Francis B. Greene, of Dartmouth, provided that after the payment of certain gifts, and after the lapse of annuities and a trust fund, the College should receive the rest of his property, one-half for its general fund, one-half to found the Rebecca A. Greene Scholarships; Mrs. Josiah P. Cooke left \$5,000 to found the Josiah Parsons Cooke Scholarship, and \$5,000 subject to certain life interests. These scholarships will contribute toward the best welfare of the College by bringing desirable students who would not otherwise be able to obtain a college education. To do the work which lies before Radcliffe is expensive in teachers, in books, and in laboratory facilities. The sum total of three of the bequests mentioned before is \$150,000, but it is probable that no considerable part of this money will be available for two years at least. Even if we take into account all these bequests, the rate at which the endowment is increasing to-day is not sufficient to ensure an exceptionally strong institution to-morrow. Radcliffe should obtain during the next few years a position of preëminently commanding importance.

Everyone realizes that great issues are under discussion in the education of women to-day. American parents are constantly demanding better education for their daughters, and there is a rapid increase in the number who are looking toward college. Radcliffe gives promise of large usefulness in the education of girls, not only from Massachusetts but from the South and West. No act of Harvard College was ever more generous or more timely than the recognition by the President and Fellows of "their ultimate responsibility for Radcliffe College" in the series of votes by which they constituted themselves a Board of Visitors of Radcliffe, and made it a duty of the Harvard President to

countersign the Radcliffe diplomas as equivalent to Harvard diplomas. This vital relation between Harvard and Radcliffe has ensured to the women's college a plan that works well, and is fundamentally sound. Radcliffe has remained true to its original and single purpose, to open to women instruction by Harvard teachers of the same grade as that given in the University. Notwithstanding the fact that a student's achievement is largely determined for her by her gifts and her circumstances, much may be added to her natural attainments if she is privileged to draw on Harvard's long-treasured store of knowledge and learning. Radcliffe tolerates no artificial distinctions; it is intellectually thorough; it honors the student who works. It now sends out every year one hundred young women, holders of its degrees. In all it counts 1,176 alumnae, 156 who hold from Radcliffe the degree of Master of Arts only, and 13 who hold the degree of Doctor of Philosophy. They are loyal in spirit and ready to show their loyalty by sending their pupils and their sons and daughters to Harvard and Radcliffe. Moreover, these women are uniting with thousands of graduates of other colleges in serious public and educational interests. Like Harvard, Radcliffe encourages its students to study not only the history and literature of the past, but the great industrial and scientific problems of the present.

MARY COES, *Dean*.

APPENDIX

REPORT OF THE MEDICAL ADVISER

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR,—I have the honor to present in tabular form a report of the work of the Medical Adviser and of the Stillman Infirmary for the academic year 1910-11.

The five hundred and eighty-one patients cared for at the Stillman Infirmary are included in Tables I and II. It is gratifying to note that of these five hundred and eighty-one patients, there was no death, and only eight were discharged unrelieved. Of these eight, one, Paul Mariett, is still suffering from an incurable disease.

The number of cases of appendicitis was markedly less than for the preceding year, and only ten operations were required, as compared with nineteen for 1909-10.

I have knowledge of only three deaths among the student body at large:—

A. L. M. Dejonge, February 15, pneumonia.

S. P. Parsons, May 13, drowned.

A. E. Smith, June 27, prussic acid poisoning.

It is interesting to note the increasing preference of the students for the wards over private rooms at the Infirmary. The relation of room to ward patients for the nine years since the Infirmary was opened is as follows:—

	1902-03	1903-04	1904-05	1905-06	1906-07	1907-08	1908-09	1909-10	1910-11
Room . . .	89	117	113	91	99	83	93	102	94
Ward . . .	134	173	264	341	368	458	366	473	487

I think these figures show how the beautiful wards presented by Mr. Stillman with the Infirmary have gone far toward removing the common prejudice to hospital wards as the students have become more familiar with their attractiveness and comfort. A large per cent of room patients are not cared for in the ward simply because the nature of their illness requires either isolation or complete quiet.

MARSHALL H. BAILEY, *Medical Adviser.*

TABLE I
ILLNESS REPORT, 1910-11

Diseases	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
Appendicitis	1	3	1	4	8	4	7	1	4	..	38
Asthma	1	2	1	1	..	..	..	..	..	5
Bronchitis	6	2	1	12	6	4	1	3	..	35
Chicken-pox	2	..	1	1	1	..	..	..	5
Colds — unclassified	22	50	42	62	39	50	41	16	3	325
Coryza	5	3	4	8	1	4	3	2	..	30
Diarrhoea	8	1	..	2	1	3	1	4	..	20
Diphtheria	1	1	2	..	..	..	..	..	4
Ear, of the	5	..	2	8	7	1	1	1	1	26
Eye, of the	6	13	8	14	13	30	36	36	5	161
General Debility	4	7	6	14	17	11	20	12	1	92
Headache	1	1	2	..	..	1	3	..	8
Heart, of the	1	..	..	..	..	..	..	..	1
Indigestion	5	10	6	8	12	17	8	7	..	73
Insomnia	4	2	1	2	..	..	1	1	11
Jaundice	4	5	2	2	6	2	..	3	..	24
La Grippe	7	12	11	91	64	46	14	2	..	246
Laryngitis	1	1	1	5	2	1	..	..	..	11
Malaria	2	3	..	..	..	1	2	1	..	9
Measles	1	1	2	2	8	7	3	2	26
" German	1	1	20	19	10	1	52
Miscellaneous	3	33	45	38	37	22	35	25	30	3	271
Mumps	1	..	2	3
Neuralgia	2	..	1	1	3	1	..	1	9
Pertussis	1	..	1	..	..	2
Pharyngitis	5	1	6	2	1	5	1	9	..	30
Pleuritis	2	..	1	..	..	..	1	1	5
Pneumonia	1	..	1	3	..	..	3	..	..	8
Rheumatism	3	3	2	3	3	6	2	1	2	25
Scarlet Fever	1	..	..	2	..	..	2	2	..	7
Skin, of the	3	2	2	4	2	3	1	1	18
Surgical	36	32	37	25	15	25	22	26	8	226
Teeth, of the	3	5	3	4	1	3	1	1	..	21
Tonsillitis	1	6	12	18	33	27	23	16	49	8	188
Totals	5	167	225	200	357	252	308	233	228	35	2010
Visits	93	113	115	226	153	163	112	215	100	1290
Office consultations, medical	12	244	288	229	427	246	331	264	318	98	2457
Office consultations, surgical	7	97	101	120	125	93	129	80	99	47	898
Total number of con- sultations	19	434	502	464	778	492	623	456	632	245	4645

Cases not seen by the Medical Adviser 765

TABLE II
ILLNESS REPORT AS RELATED TO THE DIFFERENT SCHOOLS

Diseases	College						Instructors	Law	Graduate	Totals
	1	2	3	4	Sp.	Un.				
Appendicitis	7	6	5	7	..	2	..	2	4	33
Asthma	1	4	..	..	..	..	..	..	..	5
Bronchitis	11	9	5	4	..	..	..	4	2	35
Chicken-pox . . . . .	..	1	1	..	..	..	..	2	1	5
Colds, unclassified	117	88	66	32	3	4	1	6	8	325
Coryza	11	8	6	2	..	..	..	3	..	30
Diarrhoea	9	3	2	2	..	1	1	1	1	20
Diphtheria	1	1	1	..	..	..	..	1	..	4
Ear, of the	11	5	2	1	..	..	..	5	2	26
Eye, of the	49	47	42	18	..	3	..	1	1	161
General Debility	22	19	16	9	4	7	..	2	13	92
Headache	3	3	..	2	..	..	..	..	..	8
Heart, of the . . . . .	..	1	..	..	..	..	..	..	..	1
Indigestion	27	17	13	9	..	1	1	2	3	73
Insomnia	1	2	4	2	1	..	..	1	..	11
Jaundice	5	9	2	2	..	..	..	3	3	24
La Grippe	82	51	38	33	1	3	..	23	15	246
Laryngitis	4	3	..	3	..	1	..	..	..	11
Malaria . . . . .	..	2	2	2	..	..	..	1	2	9
Measles	7	4	3	3	..	..	..	4	5	26
" German	16	13	6	9	..	..	..	2	6	52
Miscellaneous	78	56	47	31	5	6	1	26	21	271
Mumps	1	..	1	..	..	..	..	..	1	3
Neuralgia	4	1	4	..	..	..	..	..	..	9
Pertussis	1	..	1	..	..	..	..	..	..	2
Pharyngitis	10	5	8	5	..	..	..	2	..	30
Pleuritis	1	1	1	..	..	..	..	1	1	5
Pneumonia	5	1	..	..	..	..	..	..	2	8
Rheumatism	7	5	4	5	1	..	..	1	2	25
Scarlet Fever	2	..	1	2	..	..	..	1	1	7
Skin, of the	6	5	5	..	..	..	1	..	1	18
Surgical	60	50	46	30	1	7	2	20	10	226
Teeth, of the	5	8	4	3	..	..	1	..	..	21
Tonsillitis	63	42	32	14	..	2	..	18	17	188
Totals	627	470	368	230	16	37	8	132	122	2010
No. of Students	671	516	482	382	75	91	..	802	..	
% of "Sign-offs"	98	91	76	60	21	41	..	16	..	
No. of Students at Infirmary	121	80	98	71	6	11	7	98	86	
% of "Sign-offs"	18	16	20	19	8	12	..	12	..	

TABLE III

STILLMAN INFIRMARY

LIST OF CASES, 1910-11

Abcess—miscellaneous	6	La Grippe	188
“ peritonsillar	7	Laryngitis	3
Anemia—pernicious	1	Malaria	3
Appendicitis	18	Measles	18
Bronchitis	14	“ German	37
Burns	5	Melancholia	1
Chicken-pox	4	Miscellaneous Medical	86
Colds—unclassified	43	Miscellaneous Surgical	47
Concussion—cerebral	2	Mumps	5
Debility	6	Otitis Media	12
Diphtheria	3	Pharyngitis	7
Dislocation—of elbow	1	Pleuritis	5
Enchondroma	1	Pneumonia	7
Fracture—of fibula	1	Rheumatism	7
“ “ tibia	1	Scarlet Fever	5
“ “ ulna	1	Sprains	7
Hernia	4	Synovitis—of knee	5
Herpes Zoster	4	Tonsillitis	60
Indigestion	8	Tonsillectomy	3
Infected knee and general sepsis	1	Wounds	5
Infections—localized	19	No diagnosis	11
Insomnia	7		—
Jaundice	7	Total	581

Room patients	94
Ward patients	487
Total	581

Discharged—well	406
“ relieved	167
“ not relieved	8
Total	581

Total number of hospital days	3,883
Daily average	14.22

Total number of operations	46
Operations for Appendicitis	10

REPORT OF THE APPOINTMENT OFFICE

TO THE PRESIDENT OF THE UNIVERSITY:—

SIR, — The following Report, rendered by the Appointment Office, describes the work of that Office in 1910-11. The work consists of the recommendation of Harvard men (*A*) to fill *academic* positions in universities, colleges, schools, or institutions of research; (*B*) to fill positions *not academic*, including institutional, technical, or business positions. These recommendations may be made by the Chairmen or other representatives of the Divisions and Departments of the Faculty of Arts and Sciences, by the Deans of the Professional Schools,¹ by the representatives of the Faculty in coöperation with the Office of the General Secretary of The Harvard Alumni Association, or by that Office independently.

It may be well to call attention to some of the facts which the following tables show. In the number of academic appointments those in Universities and Colleges lead with 122; then follow in order Private Schools, 40; Public Schools, 13; and Technical Schools, 10. According to the classification by subject English leads with 50; then follow History, 15; Philosophy, 13; Mathematics, 12. In the table of appointments other than academic an attempt has been made this year to classify more carefully than before the nature of the appointments made. Numerically, General Manufacturing leads with 42, 13 of which are in Manufacturing proper; Public Service Corporations follow with 14; Construction and Consulting Engineering, 12; Banking and Brokerage, 7.

In the table of the general summary it is noticeable that 97 out of 200 academic appointments are in the North Atlantic Section of the United States. Out of the 112 appointments not academic 89 are in that same section. In the preparation of these figures men employed by a corporation have been regarded as working wherever the central house of that corporation may be, though they may have been delegated to other parts of the country. In 1910, out of 165 academic appointments 92 were in the North Atlantic States, and out of 74 appointments not academic 62 were in the same section.

In 1910 the average salary reported for academic positions was \$1,297; in 1911, \$1,310; the average salary reported for a position not academic was in 1910, \$991; in 1911, \$888. In the case of academic appointments in both years these averages are made somewhat higher by the fact that in several instances the salaries were unusually large. The disparity between the average salary for teaching and for business positions may be accounted for by the fact that the business positions were in many cases appointments where the training was a large part of the return, whereas the salaries of the teaching positions begin higher and look for less future financial advancement.

¹ No official reports have been made by the Deans of the Professional Schools.

(A) ACADEMIC

I. REGISTRATION OF TEACHERS

(a) Available ¹	684
(b) Unavailable ²	1496
Total	2180

II. CALLS FOR TEACHERS

(a) Direct from universities, colleges, and schools	544
(b) Indirect:	
From institutions requesting endorsement of candidates, or from candidates requesting endorsement of candidacy .	124
From teachers' agencies	209
Total	877

III. APPOINTMENTS

(a) Teaching and Administrative

	Number of Positions	Number of Salaries Reported	Aggregate Salaries Reported
1. Universities or Colleges			
Regular Teachers			
Direct	92		
Indirect	24		
Substitute Teachers			
Direct	6	122	113
	—		\$146,381
2. Technical Schools			
Direct	10	9	8,330
3. Normal Schools			
Direct	2		
Indirect	2	4	3
	—		4,100
4. Industrial Schools			
Direct	2	2	3,200
5. Public High Schools			
Direct	13	13	17,035
6. Private or Endowed Schools			
Direct	33		
Indirect	7	40	39
	—		52,375
Total	191	179	\$231,421

¹ File containing candidates active at any time.² File containing candidates available only for advancement, or for other reasons unavailable.

Classification according to Subjects and Departments:—

1. Subjects

Number of
Positions

Greek	3
Latin	2
Greek and Latin	3
Greek and Mathematics	1
Greek, Latin, and Elementary Mathematics	1
Latin, German, and Spanish	1
Latin and General Elementary Subjects	1
English	50
English and French	1
English, French, German, and History	1
English and History	1
English and Mathematics	1
English, Mathematics, and Latin	1
Journalism	1
Public Speaking	1
German	5
German and English	1
German and Latin	1
German, Latin, and Spanish	1
Romance Languages	2
French	5
French and Elementary Subjects	1
French and German	8
French, German, and Spanish	1
French and Latin	1
French and Spanish	1
Spanish	1
History	15
History and Political Science	1
History, Mathematics, Physics, and Physiography	1
Economics	5
Economics and History	1
Philosophy	13
Philosophy and Education	1
Social Ethics	1
Education	2
Music	1
Mathematics	12
Mathematics, Physics, and Botany	1
Engineering	2
Physics	2
Chemistry	9
Chemistry and Geography	1
Economic Geography	1
Forestry	2
Biology	7
General Science	1
General Elementary Subjects	4
Physical Training	1

Carried forward..... — 181

APPENDIX

257

Brought forward.....				181
2. Administration				
Dean				1
Directors				2
Head-master				1
Principals				2
Assistant Principal				1
Supervising Principal				1
Superintendents				2
				<hr/> 10
Total				<hr/> 191
(b) Scientific Research				
	Number of Positions	Number of Salaries Reported	Aggregate Salaries Reported	
1. Anthropology	1			
2. Astronomy	2			
3. Biology				
Economic Entomology ...	1			
Genetics	2			
Horticulture	1			
Plant Pathology	1	5		
	<hr/>			
4. Chemistry	1			
	<hr/>			
Total	9	4	\$6,800	

(B) NOT ACADEMIC

I. REGISTRATION

(a) Engineers (Association of Harvard Engineers)		30	
(b) Business Men (Harvard Alumni Association)			
Available	515		
Not available	1212	1727	
	<hr/>	<hr/>	
		1757	

II

Calls upon The Harvard Alumni Association 220

III. APPOINTMENTS

	Number of Positions secured through		Number of Salaries Reported	Aggregate Salaries Reported
	Faculty	Harvard Alumni Association		
(a) Government Service				
1. Consular	1			
2. Customs		1		
3. Diplomatic		1		
4. Forest	4			
5. Interior		1		
6. Tariff	1		9	3
	<hr/>	<hr/>	<hr/>	<hr/>
Carried forward.....			9	3
				\$4,900

	Brought forward			9	3	\$4,900
(b)	Institutions not Academic					
	1. Association (Secretary)	1				
	2. Church (Minister)	1				
	3. Hospital (Medical Assistant) . .	1				
	4. Library (Secretary)		2			
	5. Research (Treasurer)	1		6	5	5,900
		—	—			
(c)	Business					
	1. Accounting and Auditing	2		2	2	2,800
		—				
	2. Banking and Brokerage	1	7	8	8	2,710
		—	—			
	3. Engineering (Construction and Consulting)	11	1	12	5	4,200
	4. Insurance and Real Estate . .		2	2	2	1,870
		—				
	5. Journalism					
	Advertising		2			
	Reporting		1	3	3	3,904
		—				
	6. Manufacturing					
	Shop and Manufacturing proper	13				
	Sales	1	6			
	Management (Efficiency) . .	2	6			
	Technical					
	Chemistry	6	3			
	Engineering	4	1	42	35	29,216
		—	—			
	7. Mercantile					
	Wholesale and Brokerage . .	1	4			
	Management		2	7	7	3,444
		—	—			
	8. Plantation Management . . .		1	1		
		—	—			
	9. Publishing		2	2	2	1,820
		—				
	10. Public Service Corporations					
	Railroad					
	Engineering	8	2			
	Telephone					
	Administration	1	1			
	Engineering	2		14	9	11,812
		—	—			
	11. Secretaryships (Private) . . .		4	4	4	4,416
		—	—			
	Total		112	85		\$76,992

(C) GEOGRAPHICAL DISTRIBUTION

	Universities Colleges	Technical Schools	Normal Schools	Public Schools	Private Schools	Industrial Schools	Scientific Research	Not Academic	Totals for States	Totals for Divisions
NORTH ATLANTIC DIVISION:										186
Maine	4	..	..	..	..	..	..	1	5	
New Hampshire	4	1	1	1	3	..	..	1	11	..
Vermont	2	..	..	..	..	..	..	..	2	..
Massachusetts	7	2	1	5	16	2	1	52	86	..
Rhode Island	4	..	1	..	1	..	..	..	6	..
Connecticut	2	..	..	1	1	..	1	2	7	..
New York	8	1	..	1	2	..	3	24	39	..
New Jersey	2	..	..	..	5	..	..	3	10	..
Delaware	1	..	..	..	..	..	..	2	3	..
Pennsylvania	10	1	..	1	1	..	..	4	17	..
SOUTH ATLANTIC DIVISION:										24
Maryland .....	..	..	..	1	2	..	..	..	3	..
District of Columbia	1	..	..	..	..	..	2	7	10	..
Virginia	2	..	..	1	..	..	..	..	3	..
West Virginia	1	..	..	..	..	..	..	..	1	..
North Carolina	2	..	..	..	..	..	..	..	2	..
South Carolina	2	..	..	..	..	..	..	..	2	..
Georgia .....	..	1	..	..	1	..	..	..	2	..
Florida	1	..	..	..	..	..	..	..	1	..
SOUTH CENTRAL DIVISION:										23
Kentucky	2	..	..	1	..	..	..	..	3	..
Tennessee	1	..	..	..	..	..	..	..	1	..
Arkansas	4	..	..	..	..	..	..	..	4	..
Oklahoma .....	..	..	1	..	..	..	..	..	1	..
Texas	1	1	..	..	..	..	..	..	2	..
Missouri	6	..	..	1	4	..	..	..	11	..
Kansas	1	..	..	..	..	..	..	..	1	..
NORTH CENTRAL DIVISION:										42
Ohio	4	..	..	..	..	..	..	..	4	..
Illinois	5	..	..	..	2	..	..	10	17	..
Michigan	1	1	..	..	..	..	..	1	3	..
Wisconsin	13	..	..	..	..	..	..	..	13	..
Minnesota	2	..	..	..	..	..	..	..	2	..
North Dakota	1	1	..	..	..	..	..	..	2	..
South Dakota	1	..	..	..	..	..	..	..	1	..
WESTERN:										21
Colorado	3	..	..	..	..	..	..	1	4	..
Utah	1	..	..	..	..	..	..	..	1	..
Washington	6	..	..	..	..	..	..	..	6	..
Oregon	4	..	..	..	..	..	..	..	4	..
California	4	..	..	..	2	..	..	..	6	..
CUBA .....	..	..	..	..	..	..	..	1	1	1
HAWAII .....	..	..	..	..	..	..	1	..	1	1
ARGENTINE REPUBLIC .....	..	..	..	..	..	..	1	..	1	1
CANADA	8	1	..	..	..	..	..	1	10	10
ENGLAND .....	..	..	..	..	..	..	..	..	1	1
INDIA .....	..	..	..	..	..	..	..	1	1	1
JAPAN	1	..	..	..	..	..	..	..	1	1
Total Positions	122	10	4	13	40	2	9	112	312	312

(D) SUMMARY OF APPOINTMENTS

Geographical Distribution	Academic 1911	Not Academic 1911	Academic 1910	Not Academic 1910
North Atlantic.....	97	89	92	62
South Atlantic	17	7	12	4
South Central	23		4	
North Central	31	11	40	5
Western	20	1	11	1
Dependencies	3	1		
Foreign Countries	9	3	6	2
	<hr/>	<hr/>	<hr/>	<hr/>
	200	112	165	74
	<hr/>	<hr/>	<hr/>	<hr/>
Total		312		239
Aggregate Salaries	\$229,821	\$76,992	\$210,209	\$68,388.40

L. B. R. BRIGGS, *Dean,*
Faculty of Arts and Sciences.

E. H. WELLS, *General Secretary,*
The Harvard Alumni Association.

REPORT OF THE SECRETARY FOR STUDENT EMPLOYMENT¹

An easy method of indicating recent achievements and present needs of the Office for Student Employment is given in the following summary:

	1909-10	1910-11
Men registered for term-time work	560	599
Men who secured term-time work	436	272
Men registered for summer work	584	638
Men who secured summer work	204	138

Total registration for term-time and summer work,
allowing for men registered for both 956² 1021³

An increase of 65 men registered and a decrease of 230 employed.

The division of the registration among the different Departments of the University is as follows:—

College	619	Dental	8
Medical	38	Scientific	18
Law	128	Extension	2
Graduate	124	Special	23
Business	13	Unclassified	30
Divinity	9	Assistants	9
		Total	1,021

	1909-10	1910-11
Amount earned by 436 men through the aid of the office during term-time.	\$45,699.32	
Amount earned by 278 men through the aid of the office, the departments of the University, and The Alumni Association during term-time . . .		\$63,263.29
Amount earned by 204 men through the aid of the office during the summer of 1910	20,062.40	
Amount earned by 157 men through the aid of the office, the departments of the University, and The Alumni Association during the summer of 1911		23,568.64
Total amounts	\$65,761.72	\$86,831.93

¹ Total amount reported earned independently by
men registered with the office during term-time 31,823.55

Total amount reported earned during the
year \$118,655.48

¹ On July 1, 1911, Roger Alden Derby, '06, resigned as Secretary for Employment, and Edward Eyre Hunt, '10, was appointed his successor. The statistics in the following report, therefore, are based on the figures of Mr. Derby's year.

² 1909-10, 188 duplicate registrations; 1910-11, 216 duplicate registrations.

³ To 571 inquiries 231 replies were received, and these replies reported 25,580½ working hours.

It appears from the foregoing summary that there has been a distinct tendency to concentrate the work in the hands of a very few, and to give it, therefore, to the best fitted or to the most needy. Frequently, of course, the most needy are the best fitted; but the terms are not synonymous. Whatever the cause, there is danger to the service in this concentration. Too small a proportion of the men registered are given even a preliminary trial. They lose interest or else they are obliged to look for employment elsewhere. It is now commonly understood among the students that unless a man really needs work, he should not register with the office. The man who would like to work and the man who must work are thus differentiated even before registration, and after registration the more needy man receives preference over the less needy. In other words, there is and always has been an inevitable tendency to give to the service of the Employment Office a semi-philanthropic cast. Employment very often, like stipend-bearing scholarships or aids, has been awarded on a basis of need.

It is not because less attention should be paid to the wants of the needy but because wider scope should be offered to the talents of the able that this comment is made. Remedy for much of the difficulty lies in an extension of the opportunities for employment, and the first steps should be (1) an adequate study of the seasonable demand for part-time employment in Boston and Cambridge, and (2) an insistent policy of judicious publicity directed at those who have such employment in hand. An endowment seems the prerequisite for such a programme. The Students' Employment Office is to help men to help themselves; and its purpose will be clearer when all the men registered can be given a thorough test, and when the community at large can feel that in employing Harvard men it secures competent, punctual, business-like service guaranteed by the University.

That it is necessary for the office to instruct students in habits of business accuracy and promptness is evidenced by the fact that in answer to 571 letters of inquiry sent to men registered during term-time, in an attempt to compile statistics of the total sum of money earned independent of the efforts of the Employment Office on behalf of such men, but 231 replies were received. Such a lackadaisical attitude toward the Office is obviously harmful to the service which it tries to render.

In an effort to minimize the handicap of distance from the Cambridge office under which men labor in the Medical and Dental Schools, the Secretary for Student Employment keeps an office hour once a week in the Administration Building, Longwood Avenue, Boston.

The following table shows the number of temporary positions filled — 1,942 in all — through the aid of the Office, the Departments of the University and The Alumni Association: —

Agent	15	Literary work	
Attendant	4	Critic	1
Boatman	3	Editor	1
Camp Councillor, tutor	11	Newspaper correspondent	1
Canvasser, solicitor	48	Meter Reader	6
Cashier	2	Model	3
Cataloguer	8	Monitor	111
Chauffeur	2	Musician	16
Choreman	53	Night School Teacher	7
Clerk, unclassified	192	Office Boy	1
Clerk, office	10	Outing Class Teacher	1
Club employee	2	Photographer	2
Coach	2	Playground Director	2
Companion	16	Proctor (examination)	110
Computer	2	Proof-reader	2
Detective	4	Reader	6
Draftsman	9	Room for Services	9
Electrician	1	Salesman	17
Errandman	52	Scene Shifter, Chair Mover	11
Expressman	7	Secretary	4
Farm Hand	2	Settlement Worker	3
Forester	7	Statistician	2
Gate Keeper, Guard, Usher	72	Stenographer	32
General Man on Estate	2	Substitute for Schools	5
Geologist	1	Supernumerary	4
Guide	169	Supervisor of Study	19
Hotel Employee	5	Supervisor and Tutor	8
Interpreter	1	Surveyor	3
Legal work	2	Ticket Taker	436
Library work		Translator	13
Attendant	3	Tutor and Companion	52
Classifier	2	Tutor (special subjects)	110
Messenger	1	Typewriter	105
		Waiter	128
		Watchman	1

1,942

¹ Six of these are tutoring positions for one year.

ORDINARY DEGREES CONFERRED, 1907-11

	1907	1908	1909	1910	1911
Bachelors of Arts	448	379	421	452	414
Bachelors of Arts out of course	68	60	73	52	62
Bachelors of Science	79	50	60	57	44
Bachelors of Science out of course	17	10	13	12	25
Bachelors of Divinity	7	12	12	6	6
Bachelors of Divinity out of course	0	0	0	0	0
Bachelors of Laws	183	159	163	182	168
Bachelors of Laws out of course	23	13	14	11	13
Bachelors of Agricultural Science	6	7	5	1	0
Bachelors of Agricultural Science out of course	2	0	0	1	0
Doctors of Public Health	0	0	0	0	2
Doctors of Medicine	70	69	55	73	85
Doctors of Medicine out of course	0	2	3	0	2
Doctors of Dental Medicine	24	18	10	24	12
Doctors of Dental Medicine out of course	0	0	5	0	0
Masters of Arts	124	116	112	142	163
Masters of Arts out of course	8	8	7	0	0
Masters of Science	2	4	3	4	0
Masters of Science out of course	0	0	0	0	0
Doctors of Philosophy	33	43	38	37	41
Doctors of Science	1	0	0	0	1
Metallurgical Engineers	0	0	0	0	1
Mining Engineers	1	3	5	3	8
Masters in Civil Engineering	2	1	2	1	5
Masters in Mechanical Engineering	0	3	0	4	1
Masters in Electrical Engineering	0	1	3	4	8
Masters in Electrical Engineering out of course	0	0	0	1	0
Masters in Architecture	2	1	2	2	0
Masters in Landscape Architecture	1	1	0	1	4
Masters in Forestry	2	4	5	3	5
Masters in Forestry out of course	0	0	0	0	1
Masters of Science in Chemistry	0	0	0	0	1
Masters of Science in Botany	0	0	0	0	3
Masters of Science in Zoölogy	0	0	0	0	1
Masters in Business Administration	0	0	0	8	8
Totals	1098	964	1011	1081	1084
<hr/>					
Commencement Certificates	0	1	1	1	1

INDEX

	PAGE
Accounts	22
Administrative Boards	101, 139
Admission, New Requirements for	5, 25, 73
Advisers for Freshmen	9, 72
Agassiz, Alexander	211
Affiliation with Western Colleges	21
Andover-Harvard Library	19, 161
APPLETON CHAPEL AND PHILLIPS BROOKS HOUSE, Report on	170
APPOINTMENT OFFICE, Report on	254
ARNOLD ARBORETUM, Report on	187
ATHLETIC SPORTS, Report of the Chairman of the Committee on	83
Advisory Committee	83
Baseball	84
Francis Hardon Burr Memorial	83
Class in General Athletics for Beginners	84
Football	84
Track Team	84
BOTANIC GARDEN, Report on	178
BOTANICAL MUSEUM, Report on	185
Bowen, John Templeton	5
Brinckerhoff, Walter Remsen, Death of	5, 138, 141
Chapel, Attendance at	14, 170
CHEMICAL LABORATORY, Report on	23, 190
Choice of Electives	8, 73
Class of 1886, Gift of	22
College Dormitories	13
Deaths of Students	77, 250
Deficit	22
Degree with Distinction	73
Degrees —	
Juris Doctor	15
Doctor of Public Health	16, 136
Associate in Arts	241
Degrees conferred, 1907-11	266
DENTAL SCHOOL, Report on	23, 151
Courses of Instruction	151
Courses by Instructors in the Medical School	155
Endowment Fund	158
Enrolment of Students	151
Evening Course	154
Gift	156
Hygiene Exhibit in Germany	157
Lectures and Investigations	156

DENTAL SCHOOL (<i>continued</i>).		PAGE
Library		157
Memorial to Dr. Dwight M. Clapp		157
Meeting of the Dental Faculties Association of American Universities		156
Summer Course		155
Statistics		152
Dexter, Franklin		156
Dining Halls		13
DIVINITY SCHOOL, Report on	18, 122	
Andover Theological Seminary		125
Courses of Instruction		125
Degrees awarded		125
Enrolment		123
Interchange of Instruction with Faculty of Arts and Sciences		124
King's Chapel Lectures		128
Library		129
Registration Statistics		123
Summer School of Theology		122
Dwight, Thomas, Death of	5, 138, 139, 145	
Electives, Choice of	8, 73	
Extension Courses, Commission on	19, 240	
Exchange of Professors	21	
FACULTY OF ARTS AND SCIENCES, Report on	31	
Advisers for Freshmen	72	
Degree of S.B. with Distinction	73	
List of Courses	31	
New Rules for the Choice of Electives	72	
New Scheme for Admission	73	
Report of Committee on Choice of Electives	73	
Report of Committee on the Relation of the University to Secondary Schools	74	
Fellowships for Research	14, 104	
Fleming, Williamina Paton, Death of	198	
Fogg Art Museum, Report on	226	
Football	84	
Freshman Dormitories	22	
GERMANIC MUSEUM, Report on	230	
Gifts	22, 120, 134, 138, 156, 166, 175, 189, 191, 205, 216, 219, 226, 231, 246	
GRADUATE SCHOOL OF APPLIED SCIENCE, Report on	15, 106	
Budget	110	
Bussey Institution	110	
Changes in Arrangement of Pierce Hall	108	
Department of Architecture	109	
Department of Landscape Architecture	109	
Division of Engineering	107	
Division of Forestry	108	
Division of Mining and Metallurgy	109	
Engineering Camp	108	
Enrolment in	106	
Gordon McKay Professor of Sanitary Engineering	107	
Scientific School	106	

	PAGE
GRADUATE SCHOOL OF ARTS AND SCIENCES, Report on	14, 88
Administrative Board	101
Admission	102
Bayard Cutting Fellowship for Research in Physics	105
Birthplaces of Students	98
Classification of Students	89
Colleges and Universities Represented	92
Degrees, Recommendations for: 1909-11	94
Fellows, Resident and Non-Resident	98
Fellowships and Scholarships	100
Language Requirements for Degrees	108
Needs	108
United States Bureau of Education	102
Students from Harvard and from other Colleges	98
Ph.D.'s of 1911	95
GRADUATE SCHOOL OF BUSINESS ADMINISTRATION, Report on	28, 112
Business School Club	119
Changes in Courses	114
Coöperative Lecture Courses	114
Degrees awarded	118
Enrolment of Students	112
Gift for Books	120
Lecturers	115
Prizes	114
Reading Room	119
Shaw Fund for Business Research	120
Study Tours	119
Summer Employment	119
University Scholarships	114
Visiting Committee	120
GRAY HERBARIUM, Report on	178
Hall, Thomas, Death of	5
HARVARD COLLEGE, Report on	77
A.B. Degree	77
Admission Examinations under the New Plan	80
Deaths	77
Enrolment	77
Freshman Class	79
Gains and Losses	78
Report of Assistant Dean	80
S.B. Degree	78
Special Students	79
Hospitals	16, 186, 187, 146
Illness Report	250
JEFFERSON PHYSICAL LABORATORY, Report on	192
LAW SCHOOL, Report on	15, 180
Increased Requirement for Second-Year Students	184
Ames Prize	184
Collection of Portraits	184
Courses of Instruction	182
Library	180

LAW SCHOOL (continued).	PAGE
Registration	131
New Scholarship	134
Student Advisers	135
LIBRARY, Report on	159
Accessions	163
Appendix	163
New Building	160
Catalogue Cards	160
Departmental Libraries	161
Extract from Librarian's Report	166
Income and Expenditure	164
New Funds	159, 166
Gifts	167
Shelf Department	166
Special Reference Libraries	165
Subject Catalogue	160
Transfer of Books	161
Lowell, Francis Cabot, Death of	217
McConnell, Ray Madding, Death of	5
Macvane, Silas Marcus	5
MEDICAL SCHOOL, Report on	15, 139
Administrative Board	139
Alumni Association	145
Anatomy	139
Bacteriology	141
Buildings and Grounds	139
Cancer Commission	146
Clinic	147
Clinical Medicine	143
Comparative Pathology	142
Comparative Physiology	140
Collis P. Huntington Memorial Hospital	146
Faculty Council	139
Obstetrics and Gynaecology	144
Pathology	141
Pediatrics	143
Pharmacology	143
Physiology	140
Preventive Medicine and Hygiene	142
Proctor Fund	145
Statistics	147
Surgery	144
Theory and Practice of Physic	143
Warren Anatomical Museum	145
MEDICINE, FACULTY OF, Report on	136
Deaths	138
Degree of Doctor of Public Health	136
Degrees awarded	138
Director of Scholarships	136
Gifts and Bequests	138

MEDICINE, FACULTY OF (<i>continued</i>).	PAGE
Graduate School of Medicine, Reorganization of	186
Peter Bent Brigham Hospital	186
Collis P. Huntington Memorial Hospital	187
Summer School	186
Henry P. Walcott Fellowship	187
MINERALOGICAL MUSEUM AND LABORATORIES OF MINERALOGY AND	
PETROGRAPHY, Report on	216
MUSEUM OF COMPARATIVE ZOOLOGY, Report on	204
Moore, Emma Wilson, Death of	188
Needs of the University	22
New Plan of Examinations in the Medical School	16, 26
OBSERVATORY, Report on	197
Oral Examinations in French and German	12
PBABODY MUSEUM OF AMERICAN ARCHAEOLOGY AND ETHNOLOGY,	
Report on	217
Pringle, Cyrus Guernsey, Death of	178
PSYCHOLOGICAL LABORATORY, Report on	194
PUBLICATION OFFICE, Report on	238
RADCLIFFE COLLEGE, Report on	244
Scudder, Samuel Hubbard, Death of	217
SEMITIC MUSEUM, Report on	224
Seniors in the College Yard	18
Special Students	79
STUDENT EMPLOYMENT, Report of Secretary of	261
Sumichrast, Frederick Caesar de	5
SUMMER SCHOOL OF ARTS AND SCIENCES	255
UNIVERSITY EXTENSION, Report on	235
ZOOLOGICAL LABORATORY, Report on	218

TREASURER'S STATEMENT

CONTENTS

	PAGE
EXHIBIT A. Balance Sheet,	6
B. Consolidated Statement of Income and Expenditure,	8
C. Income and Expenditure by Departments,	10
D. Gifts for Capital,	12
E. Gifts for Immediate Use,	22
SCHEDULE 1. Special Investments,	45
2. Securities—General Investment,	53
3. Land and Buildings—General Investment,	58
4. Funds and Gifts,	59
5. General Suspense, Credit Balances,	81
6. General Suspense, Debit Balances,	82
7. University, Income and Expenditure,	84
8. College, Income and Expenditure,	90
9. Library, Income and Expenditure,	112
10. University, College and Library Combined Accounts,	116
11. Graduate School of Applied Science, Income and Expenditure,	117
12. Graduate School of Business Administration, Income and Expenditure,	121
13. Divinity School, Income and Expenditure,	123
14. Law School, Income and Expenditure,	126
15. Medical School, Income and Expenditure,	128
16. Dental School, Income and Expenditure,	136
17. Bussey Institution, Income and Expenditure,	137
18. Arnold Arboretum, Income and Expenditure,	138
19. Botanic Garden, Income and Expenditure,	140
20. Botanical Museum, Income and Expenditure,	141
21. Gray Herbarium, Income and Expenditure,	141
22. Observatory, Income and Expenditure,	142
23. Museum of Comparative Zoölogy, Income and Expenditure,	144
24. Peabody Museum of American Archaeology and Ethnology, Income and Expenditure,	146
25. Semitic Museum, Income and Expenditure,	148
26. Germanic Museum, Income and Expenditure,	148
27. William Hayes Fogg Art Museum, Income and Expenditure,	149
28. Appleton Chapel, Income and Expenditure,	151
29. Phillips Brooks House, Income and Expenditure,	152
30. Hemenway Gymnasium, Income and Expenditure,	153
31. Stillman Infirmary, Income and Expenditure,	154
32. Funds and Gifts for Special Purposes, Income and Expenditure,	155

CONTENTS

	PAGE
EXHIBIT A. Balance Sheet,	6
B. Consolidated Statement of Income and Expenditure, . .	8
C. Income and Expenditure by Departments,	10
D. Gifts for Capital,	12
E. Gifts for Immediate Use,	22
SCHEDULE 1. Special Investments,	45
2. Securities—General Investment,	53
3. Land and Buildings—General Investment,	58
4. Funds and Gifts,	59
5. General Suspense, Credit Balances,	81
6. General Suspense, Debit Balances,	82
7. University, Income and Expenditure,	84
8. College, Income and Expenditure,	90
9. Library, Income and Expenditure,	112
10. University, College and Library Combined Accounts, . .	116
11. Graduate School of Applied Science, Income and Expendi- ture,	117
12. Graduate School of Business Administration, Income and Expenditure,	121
13. Divinity School, Income and Expenditure,	123
14. Law School, Income and Expenditure,	126
15. Medical School, Income and Expenditure,	128
16. Dental School, Income and Expenditure,	136
17. Bussey Institution, Income and Expenditure,	137
18. Arnold Arboretum, Income and Expenditure,	138
19. Botanic Garden, Income and Expenditure,	140
20. Botanical Museum, Income and Expenditure,	141
21. Gray Herbarium, Income and Expenditure,	141
22. Observatory, Income and Expenditure,	142
23. Museum of Comparative Zoölogy, Income and Expendi- ture,	144
24. Peabody Museum of American Archaeology and Eth- nology, Income and Expenditure,	146
25. Semitic Museum, Income and Expenditure,	148
26. Germanic Museum, Income and Expenditure,	148
27. William Hayes Fogg Art Museum, Income and Expendi- ture,	149
28. Appleton Chapel, Income and Expenditure,	151
29. Phillips Brooks House, Income and Expenditure,	152
30. Hemenway Gymnasium, Income and Expenditure,	153
31. Stillman Infirmary, Income and Expenditure,	154
32. Funds and Gifts for Special Purposes, Income and Expenditure,	155

TREASURER'S STATEMENT FOR 1910-11

TO THE BOARD OF OVERSEERS OF HARVARD COLLEGE:—

The Treasurer submits the annual statement of the financial affairs of the University, for the year ending June 30, 1911.

The net income of the general investments for this period was divided at the rate of 4.85 per cent among the Funds to which these investments belong.

From the income of all bonds bought at a premium for general investments \$9,058.01 was credited to the various accounts concerned, and for special investments \$655.12, as the fair yearly repayment to make good the premiums at the maturity of the bonds.

CHARLES F. ADAMS, 2d, *Treasurer*.

Boston, November, 1911.

EXHIBIT A

CASH IN BANKS:		ASSETS	
Bursar,	\$73,841.59		
Treasurer—General,	182,522.38		
Treasurer—Special—Schedule 1,	<u>7,062.04</u>		\$263,425.96
ACCOUNTS RECEIVABLE:			
Term Bills of January, 1911,	\$168.42		
Term Bills of June, 1911,	122,512.95		
Sundry accounts of Bursar's office,	7,453.46		
Interest accrued,	<u>3,883.49</u>		133,518.32
INVENTORY—Stores,			10,076.13
INSURANCE UNEXPIRED,			23,644.41
INVESTMENTS:			
Securities—Special—Schedule 1,	\$2,630,045.84		
Securities—General—Schedule 2,	17,362,797.59		
Land and Buildings—Special—Schedule 1,	1,518,085.86		
Land and Buildings—General—Schedule 3,	<u>2,965,986.14</u>		24,476,865.43
			<u>\$24,907,580.25</u>

EXHIBIT A

BALANCE SHEET

June 30, 1911

LIABILITIES

ACCOUNTS PAYABLE:

Salaries and Aids,	\$159,001.26	
Deposits and Advance Payments,	27,251.97	\$186,253.23

CAPITAL:

Gains and Losses for General Investments,		589,020.28
Income on General Investments Unapportioned,		5,649.94
Funds and Gifts, July 1, 1910,	\$22,766,854.54	
General Suspense, July 1, 1910,	107,613.90	

\$22,659,240.64

Gifts for Capital — Exhibit D, \$1,283,138.02

Gains and losses in valuation
of Special Investments, 10,532.86

Unexpended balances of new
gifts for buildings, 194,307.83

\$1,487,978.71

Expenditures charged to Gen-
eral Suspense, 94,326.69 1,393,652.02

\$24,052,892.66

General Surplus — Exhibit B, 73,714.14

Funds and Gifts — June 30, 1911,
Schedule 4, \$24,323,194.54

General Suspense, Credit
Balances, June 30, 1911,
Schedule 5, 154,158.81

\$24,477,353.35

Less General Suspense, Debit

Balances, June 30, 1911,
Schedule 6, 350,746.55 \$24,126,606.80

\$24,201,353.25

EXHIBIT B**CONSOLIDATED STATEMENT OF INCOME AND
EXPENDITURE**

For the year ended June 30, 1911

INCOME**RESTRICTED INCOME:****From SPECIAL INVESTMENTS,**

Interest and Dividends— Schedule 1,	\$123,214.32	
Rents of Land and Buildings, . .	\$137,016.57	
Less Operating Expenses, . . .	55,774.55	81,242.02
Net income— Schedule 1,		<u>\$304,456.34</u>

From GENERAL INVESTMENTS,

Interest and Dividends on Securities— Schedule 2,	\$735,738.99	
Bank Balances,	4,885.56	
Advances to Departments and Miscellaneous,	17,817.31	\$757,441.86

Rents of Land and Buildings, . .	\$296,275.75	
Less Operating Expenses, . . .	113,659.69	
Net Income— Schedule 3,		<u>182,616.06</u>

Total Income General Investments,	<u>\$940,057.92</u>	
---	---------------------	--

Less balance remaining after apportion- ment to the Funds and Gifts,		<u>5,486.30</u>
---	--	-----------------

Net Income General Investments appor- tioned,		<u>934,571.62</u>
--	--	-------------------

Gifts for Immediate Use— Exhibit E,	<u>\$462,800.70</u>	
---	---------------------	--

Less Unexpended balances of new gifts for buildings, added to Funds and Gifts— Exhibit A,	194,307.83	<u>267,992.87</u>
---	------------	-------------------

Miscellaneous income,		<u>58,478.52</u>
---------------------------------	--	------------------

GENERAL INCOME:

Tuition Fees,	\$651,200.84	
Laboratory Fees,	83,970.85	
Other Fees,	68,393.16	
Gross Rents of College Dormitories, etc.	86,661.72	
Miscellaneous income,	115,010.10	<u>955,236.67</u>
		<u><u>\$3,420,736.02</u></u>

EXHIBIT B

CONSOLIDATED STATEMENT OF INCOME AND
EXPENDITURE

For the year ended June 30, 1911

EXPENDITURE

From RESTRICTED INCOME for:

Administrative Purposes,	\$3,804.80	
Educational Purposes,	460,809.27	
Other Activities,	442,612.51	
Aids,	168,908.65	\$1,076,135.23

From GENERAL INCOME for:

Administrative Purposes,	\$99,317.68	
Educational Purposes,	907,075.83	
Other Activities,	88,172.12	
Aids,	15,230.00	1,104,795.63
Repairs and equipment of College dormitories, .	\$11,807.10	
Caretaking and operating expenses of College dormitories,	30,471.09	41,778.19
Repairs and equipment of land and buildings for general purposes,	\$29,251.67	
Caretaking and operating expenses of land and buildings for general purposes,	95,061.16	124,312.83
		\$2,347,021.88
General Surplus to Exhibit A		73,714.14

\$2,420,736.02

INCOME AND EXPENDITURE

For the year ended

	INCOME		
	Restricted	General	Total
University (Sch. 7),	\$77,788.73	\$19,757.80	\$97,546.53
College, including Graduate School of Arts and Sciences, (Sch. 8), . .	461,645.55	565,305.07	1,026,950.62
Library (Sch. 9),	66,680.24	224.62	66,854.86
Graduate School of Applied Science (Sch. 11),	147,091.54	100,496.52	247,588.06
Graduate School of Business Adminis- tration (Sch. 12),	31,714.37	8,832.00	40,546.37
Divinity School (Sch. 13),	32,906.74	9,524.38	42,431.12
Law School (Sch. 14),	40,821.92	119,694.02	160,515.94
Medical School (Sch. 15),	196,326.45	88,588.82	279,915.27
Dental School (Sch. 16),	4,487.27	22,672.77	27,160.04
Bussey Institution (Sch. 17),	14,067.73	.....	14,067.73
Arnold Arboretum (Sch. 18),	53,684.50	.....	53,684.50
Botanic Garden (Sch. 19),	16,002.09	.....	16,002.09
Botanical Museum (Sch. 20),	3,050.00	.....	3,050.00
Gray Herbarium (Sch. 21),	19,031.04	.....	19,031.04
Observatory (Sch. 22),	52,227.84	.....	52,227.84
Museum of Comp. Zoölogy (Sch. 23), Peabody Museum of American Archae- ology and Ethnology (Sch. 24), . .	41,948.81	.....	41,948.81
Semitic Museum (Sch. 25),	21,860.36	.....	21,860.36
Germanic Museum (Sch. 26),	1,886.38	.....	1,886.38
William Hayes Fogg Art Museum (Sch. 27),	5,297.69	.....	5,297.69
Appleton Chapel (Sch. 28),	5,921.35	.....	5,921.35
Phillips Brooks House (Sch. 29), . .	9,783.34	.....	9,783.34
Hemenway Gymnasium (Sch. 30), . .	1,664.32	.....	1,664.32
Stillman Infirmary (Sch. 31), . . . .	.....	1,853.50	1,853.50
Funds and Gifts for Special Purposes (Sch. 32), . . \$354,171.20	3,984.31	19,100.78	23,085.09
Less Unexpended balances of new gifts for buildings, 194,307.88	159,863.37	.....	159,863.37
Less Deficits of the follow- ing departments included in the above expenditure of other departments and deducted to show the total net expenditure :			
Appleton Chapel (Sch. 28), \$552.67			
Hemenway Gym. (Sch. 30), 10,843.70			
	<u>\$1,469,685.94</u>	<u>\$951,050.08</u>	<u>\$2,420,736.02</u>

EXHIBIT C

BY DEPARTMENTS

June 30, 1911

EXPENDITURE	GENERAL		Disposition of General Deficit or Surplus			
	Deficit	Surplus	FUNDS AND GIFTS		GENERAL SUSPENSE	
			Debit	Credit	Debit	Credit
\$47,078.18	.....	\$50,468.15	.....	\$50,468.15	.....	.....
1,034,016.57	.....	2,934.05	\$26,624.96	28,909.00	\$5,716.83	\$6,866.84
98,659.99	\$31,805.18	.....	86,325.64	3,954.22	207.22	773.51
215,429.73	.....	32,156.33	.....	23,295.06	2,662.39	11,525.66
37,770.87	.....	2,775.50	285.90	.....	250.00	3,311.40
38,429.12	.....	4,002.00	.....	2,683.05	.....	1,318.95
147,463.09	.....	13,052.85	.....	3,625.93	.....	9,426.92
273,049.02	.....	6,866.25	.....	16,765.87	9,899.81	.19
35,410.98	8,250.94	.....	.....	1,091.00	9,341.94	.....
21,125.04	7,057.81	.....	.....	.....	7,057.81	.....
49,564.16	.....	4,120.34	.....	4,120.34	.....	.....
14,850.67	.....	1,151.42	.....	30.62	.....	1,120.80
1,434.29	.....	1,615.71	.....	.....	.....	1,615.71
20,032.44	1,001.40	.....	.....	.....	1,001.40	.....
56,300.94	4,073.10	.....	6,116.41	2,605.88	562.57	.....
48,276.17	6,327.86	.....	7,002.58	337.31	.....	337.91
16,266.81	.....	5,593.55	.....	2,246.60	180.00	3,506.95
21,505.97	19,619.59	.....	20,546.39	926.80	.....	.....
1,095.95	.....	4,201.74	.....	3,484.32	.....	717.42
6,847.11	925.76	.....	586.07	.....	339.69	.....
10,518.10	182.09	.....	.....	.....	182.09	.....
1,561.78	.....	102.54	225.27	327.81	.....	.....
12,697.20	.....	.....	.....	.....	.....	.....
23,051.79	.....	38.30	.....	374.80	341.50	.....
135,982.28	.....	23,881.09	.....	23,234.90	3,930.40	4,576.59
\$2,358,418.25						
11,396.37						
\$2,347,021.88	\$79,242.68	\$152,956.82	\$97,713.22	\$168,481.66	\$41,653.15	\$44,598.85
		79,242.68		97,713.22		41,653.15
		\$73,714.14		\$70,768.44		\$2,945.70

EXHIBIT D

GIFTS FOR CAPITAL

June 30, 1911

ESTABLISHING NEW FUNDS OR INCREASING OLD ONES

From the estate of Alexander Agassiz, \$50,000 in cash, and real estate valued at \$50,000, "the income of which is to be devoted to the general uses of the Museum of Comparative Zoölogy."

From the estate of Alexander Agassiz, \$101,507.50, "the income of which is to be used in defraying the expenses of publication in the Memoirs of the Museum of Comparative Zoölogy or in the Bulletin of the Museum, of sundry publications now preparing, a list of which I have left in the hands of the Curator of the Museum." The President and Fellows are authorized to pay \$500 of the income yearly to a properly qualified person who shall superintend and edit such publication, but no allowance is to be made for salaries from this fund: "the income of this fund shall be wholly expended for the expenses necessary for the illustrations and their production, and the preparation of the text." If the income is in any year insufficient, the principal may be used.

If, after the publications are completed, any part of the original \$100,000 remains, the income shall be called the Publication Fund of the Museum of Comparative Zoölogy and be used for expenses connected with the publication of the Memoirs, or of its Bulletins.

From an anonymous giver, \$18,456.25 and securities valued at \$74,112.50, to be added to the Anonymous Fund, without restriction beyond the payment of a certain annuity.

For addition to the principal of the Fund for the Professorship of Hygiene, \$10,000, from the anonymous founder of this Fund.

For the Arnold Arboretum Fund, from

B. F. Keith	\$110
Massachusetts Society for Promoting Agriculture . . .	500
	<hr/>
	\$610

From Mr. and Mrs. Bayard Thayer \$2,500 each, for the general uses of the Arnold Arboretum. This \$5,000 is to be credited for the present to the Arnold Arboretum Construction Fund, with the idea that it will eventually become part of a special Thayer Endowment Fund.

From the estate of Walter Farnsworth Baker, \$29,410.79 and real estate valued at \$46,000, further payments on account of his unrestricted bequest of one third of the residue of his estate "to the Corporation of Harvard University to be used for any purpose to help my beloved Alma Mater."

From the estate of Mrs. Caroline M. Barnard, \$6,000, "to be used and applied for scholarships known as 'The Warren H. Cudworth Scholarships,' desiring that preference should be given as far as possible to students from East Boston, Lowell and Everett, in Massachusetts, in aid of whom I have heretofore contributed."

From the estate of Mrs. Caroline M. Barnard, \$6,000, on account of her bequest of the balance of the estate as follows: "The balance, if any, remaining after these payments I give and devise to the several Institutions, Corporations and Societies named as Beneficiaries in this my said will, to be shared by them pro rata: that is to say, in the proportion which the respective bequests hereinbefore given to each, bear to the total amount of all the bequests to said beneficiaries."

For the purpose of building and endowing a Hospital for Incurable Cases of Cancer under the management of The Cancer Commission of Harvard University, \$101,000, received through Dr. J. Collins Warren, from sundry subscribers.

From members of the Class of 1844, \$207.09, to be added to the "Fund of the Class of 1844."

From William Gibbs Peckham, \$2,000, to be added to the "Class of 1867 Scholarship."

From members of the Class of 1881, \$1,270, to be added to the "Twenty-fifth Anniversary Fund of the Class of 1881."

From members of the Class of 1882, \$9,868.59, to be added to the Fund of the Class of 1882, established on the twenty-fifth anniversary of their graduation.

From members of the Class of 1883, \$7,104.41, to be added to the "Class of 1883 Fund," established on the twenty-fifth anniversary of their graduation.

From members of the Class of 1884, \$1,050, to be added to the "Class of 1884 Fund," established on the twenty-fifth anniversary of their graduation.

From members of the Class of 1885, \$3,208.98, to be added to the "Twenty-fifth Anniversary Fund of the Class of 1885."

From members of the Class of 1886, \$100,000, to establish the "Twenty-fifth Anniversary Fund of the Class of 1886."

From Archibald Cary Coolidge and Clarence Leonard Hay, \$500, to be added to "The Archibald Cary Coolidge and Clarence Leonard Hay Fund," the income to be used for the purchase of books relating to South America, for the College Library, with the right to withdraw the whole or such part of the principal as may be necessary for the purchase of any library or collection of books on South America.

From the estate of John Clarence Cutter, \$244.26 and securities valued at \$1,078, on account of Mr. Cutter's residuary bequest, one-half the income thereof to be expended to pay a certain annuity and one-half to maintain an annual course of lectures to be called the "Cutter Lectures on Preventive Medicine."

In memory of Bayard Cutting, of New York, of the Class of 1900, \$25,000, to endow a fellowship "to be known as the 'Bayard Cutting Fellowship.' The money is to be invested by the Corporation, and the annual income paid, according to the standing rules of the Corporation, to the incumbent appointed by the President and Fellows, on the nomination of the department in which the student in question is working, or with which he is affiliated as a teacher or other officer.

"It is the desire of the participants in this memorial that the Bayard Cutting Fellowship should be reserved exclusively for men of the highest intellectual attainments and of the greatest promise as productive scholars. It is never to be given to the best among any number of applicants, unless the best man is one of first rate and well-rounded excellence.

“With this general provision, the Fellowship is open, in the first place, to students of history, preference being given to students of modern European history, diplomatic history, international law, or colonial government. If no student of history, of the quality indicated above, is available in any given year, then the Fellowship is open to students of European literature, preference being given to students of French or Italian literature. If in any given year no student of the quality desired is available in either of the above-mentioned subjects, then the Fellowship is to be open to students in economics, preference being given to students of the history of economics. If in any given year no properly qualified candidate is available, then one-half the income of the fund for that year shall be paid into the principal, and the other half be assigned to the College Library for the purchase of books of permanent value, preferably in French and Italian literature.

“This Fellowship may be assigned to the same man for two or more successive years, if such an assignment is in the best interests of scholarship. This Fellowship is not limited to resident students, but may be held by non-resident students who may pursue their studies either in foreign parts or in any other university in the United States. Travelling or non-resident incumbents of the Fellowship must, however, have spent at least one year in Cambridge, either as a resident student, or as an officer of instruction or government. The Fellowship may be held, however, by resident students during their first year of residence.”

From the estate of W. Bayard Cutting, Jr., \$25,000, “to be used for such appropriate objects and purposes of said Corporation as shall be designated and appointed in writing by Edgar Huidekoper Wells, of Boston, Massachusetts, or, in case of his death before me, then by Theodore Lyman, of Brookline, Massachusetts.” According to Mr. Wells’s written request, one-half of the income is to be expended on books for the College Library and the other half to maintain the Bayard Cutting Fellowship for Research in Physics.

From William F. Drea, \$10 additional, towards the Class of 1909 Dental Endowment Fund.

For an endowment for the benefit of the Harvard Dental School, to be used for education, research, or the general expenses of the Infirmary, from

Anonymous	\$10
Mrs. Arthur W. Blake	200
Shepherd Brooks	1,000
T. Jefferson Coolidge, Jr.	250
Miss Sarah H. Gaston	25
Mrs. Ernestine M. Kettle	100
William H. Potter	50
James M. Prendergast	100
Wallace F. Robinson	500
Henry O. Underwood	1,000
	<hr/>
	\$3,235

From sixteen anonymous givers, \$482 additional, to be added to the Harvard Dental Alumni Endowment Fund.

From the estate of Mrs. Francis B. Greene, \$25,000 for the use of the Medical School.

From friends and former pupils of the late Professor Charles Gross, \$1,576.06, to form a library fund in his memory, the interest to be used for the purchase of books on English History, especially in those branches of the subject in which Professor Gross's studies lay, from

C. M. Andrews.	Howard L. Gray.
Roswell P. Angier.	Henry Gross.
James F. Baldwin.	Marks Gross.
Joseph Henry Beale.	Emanuel M. Grossman.
Justin De Witt Bowersock.	Ernst T. Gundlach.
Hiram Bingham.	Albert Bushnell Hart.
William Garrott Brown.	Charles H. Haskins.
Edward Channing.	Louis C. Hatch.
Charles Motley Clark.	Harold D. Haseltine.
Gilman Collamore.	Charles R. Henderson.
Archibald Cary Coolidge.	L. J. Henderson.
George Cunningham.	William Hudson.
H. W. C. Davis.	Gaillard T. Lapsley.
William C. Dennis.	Henry B. Learned.
David A. Ellis.	Walter Lichtenstein.
Sidney B. Fay.	Felix Lieberman.
Carl R. Fish.	Robert H. Lord.
H. A. L. Fisher.	A. Lawrence Lowell.
Kuno Francke.	Charles H. McIlwain.
Edwin F. Gay.	Selden O. Martin.
Elliott H. Goodwin.	Roger B. Merriman.

Percy Muloch.
 William B. Munro.
 Nellie Neilson.
 Watson Nicholson.
 John Noble, Jr.
 Percy V. Norwood.
 Robert E. Olds.
 Wilfred A. Openhym.
 Stephen W. Phillips.
 George W. Prothero.
 Miss Bertha H. Putnam.
 Conyers Read.
 N. Thayer Robb.
 Arthur B. Schaffner.
 William H. Schofield.
 Henry L. Shattuck.
 Walter J. Shepard.
 Adelbert Smith.

St. John Smith.
 W. H. Smith.
 James Tait.
 Frank W. Tausig.
 Theodore C. Tebbetts.
 Frederick L. Thomson.
 T. F. Tout.
 Crawford H. Toy.
 Eliot Tuckerman.
 Paul Vinogradoff.
 Frederick S. Weis.
 R. G. Wellington.
 Edgar H. Wells.
 George P. Winship.
 James E. Winston.
 Arthur Mayer Wolfson.
 J. H. Wylie.

From the estate of Charles L. Hancock, \$8,641.40, the balance of his residuary bequest, to be added to the Charles L. Hancock Fund.

From the estate of William P. Harding, \$5,000, to establish "The Selwyn L. Harding Scholarship of the Class of 1886," "the annual income of said fund in an amount not exceeding \$350 to any one beneficiary thereof, to be paid to such needy, worthy, and industrious student as shall have been connected with the University's undergraduate department for one year at least." High grade marks are not a requisite, but "my wish is rather that the benefits shall go to that class of young men who have striven to do the best work that they were capable of."

From the Harvard Edda Club, \$250, the first payment towards a scholarship fund, the income to be used for Scandinavian students.

From the estate of Mrs. Mary Hemenway, \$45,000, for the benefit of the Peabody Museum of American Archaeology "to be known as 'The Mary Hemenway Fund for Archaeology,' the income only thereof to be applied in accordance from time to time with the wishes of the Faculty of the Peabody Museum, to the benefit of its archaeological department for the prosecution of original research or purchase of exhibits or the salaries of teachers, including assistants."

From the estate of Mrs. Mary Upham Johnson, \$2,000, "to found a scholarship in the Medical Department of the University, to be called the 'William Otis Johnson Scholarship,' in memory of my husband, the late William Otis Johnson, M.D., of the Class of 1845."

Through Harold C. Ernst, \$3,000, "to be used as the nucleus for establishing a fellowship in the Medical School under the following conditions:

"The fund is to be known as the John R. Kissinger Fund, and is intended to commemorate the action of the private in the United States Army of that name who volunteered for the first yellow fever inoculation, suffered an attack of the disease, and refused compensation for his act.

"The fund is to be allowed to accumulate until it reaches the minimum sum of \$20,000. The income of this fund is then to be used to found a fellowship to pay the salary of an individual who shall engage in the investigation of the causation of infectious diseases, preferably, but not necessarily, in the direction of tropical medicine. If at any time it seems advisable, the income may be used to pay the expenses of similar investigations instead of paying the salary of an individual. The income is to be administered upon the recommendation of the Professor of Bacteriology in the Medical School." The income may be made subject to a certain annuity.

From the estate of Solomon Lincoln, of the Class of 1857, of Boston, Mass., \$10,000, "for the general use of the Department of Romance Languages and Literature in the University."

For a memorial to the late George Cabot Lodge and Joseph Trumbull Stickney, of the Class of 1895, \$3,102.40, "to establish a fund the income of which shall be used by the Harvard College Library to purchase rare and choice works of English and French poetry, in which shall be put a book-plate with their names," from

Brooks Adams.
Mrs. John W. Ames.
William Sturgis Bigelow.
George E. Barton.
Walter v. R. Berry.
Mrs. Donald Cameron.

Mrs. L. R. Cheney.
Archibald Cary Coolidge.
William C. Endicott.
Mrs. William C. Eustis.
Mrs. James T. Fields.
Miss L. Frelinghuysen.

Mr. and Mrs. Augustus P. Gardner.
 William Amory Gardner.
 Mrs. Walter Gay.
 Miss Harriet Guild.
 George A. James, 2d.
 Lady Johnstone.
 Mrs. Sergeant Kendall.
 Charles R. Lanman.
 Mr. and Mrs. Henry Cabot Lodge.
 Mrs. E. M. McClellan.

Mrs. L. M. L. Mathewson.
 Miss Marjorie Nott.
 Mrs. R. Burnside Potter.
 Spring Rice.
 Mrs. Douglas Robinson.
 Mrs. Theodore Roosevelt.
 George Santayana.
 Frederick Cheever Shattuck.
 Mrs. Albert Stickney.
 Mrs. Edward Wharton.

From Mrs. Francis Cabot Lowell, \$10,000, the income of the fund to be used to supplement, by the purchase of books of historical value more or less closely related to the subject, the collection of works on Joan of Arc, given by Francis Cabot Lowell, of the Class of 1876, of Boston, Mass.

From the estate of Gordon McKay, \$179,408.28 and securities valued at \$202,969.58, to be added to the Gordon McKay Endowment Fund.

To establish the "George Herbert Palmer Fund," "for the foundation at Harvard of a prize or scholarship in Ethics to be named for Professor Palmer," \$1,301.44. "The precise manner in which the income from this fund is to be employed will be designated later by the undersigned or their successors appointed by them

C. M. Bakewell
 Reginald C. Robbins
 Ralph Barton Perry
 W. R. Warren."

From the estate of Trenor L. Park, of the Class of 1883, of New York City, \$21,914.79, being his bequest of \$25,000 plus interest at six per cent., less \$1,250, the inheritance tax of New York and \$131.04, the interest thereon, less \$5,000, which by vote of the Corporation has been credited to the "Class of 1883 Fund."

From the estate of Henry L. Pierce, \$100, to be added to the Henry L. Pierce Residuary Bequest.

From Miss Emily Dutton Proctor, \$10,000, "to be used towards the maintenance of the new Cancer Hospital which The Cancer Commission of Harvard University is building on the grounds of

the Harvard Medical School and for the care of patients therein to its normal capacity." Principal or income, or both, may be used at the discretion of the Corporation.

From the estate of Freeborn F. Raymond, 2d, of Newton, \$5,000, "for the establishment of the Thomas William Clarke Scholarship."

From the estate of Amey Richmond Sheldon (Mrs. Frederick Sheldon), of Newport, R. I., \$4,339.83, additional, for the Frederick Sheldon Fund, "the income thereof to be applied in the discretion of and under rules to be prescribed by the President and Fellows aforesaid to the further education of students of promise and standing in the University by providing them with facilities for further education by travel after graduation, or by establishing travelling scholarships."

From Norman G. Reoch, \$100, to be added to the Joseph Warren Smith, Jr., Memorial Fund, the income of which is to be used for general purposes of the Harvard Dental School.

From members of the Class of 1877, \$254.09 additional, to be added to the Edward Henry Strobel Memorial Fund.

For the Teachers' Endowment Fund, \$8,062.25 additional, from previous contributors.

From the estate of John Harvey Treat, \$14,491.94, and securities valued at \$26,305.17, on account of his residuary bequest, "the income whereof to be used for the benefit of the Library for the purchase of books relating to the Church of England and other Churches in Communion with her, the Roman and Greek Churches, and the Episcopal Church in the United States of America especially as regards ritual matters."

To establish a fund to be known as the Fund of the Twentieth Massachusetts Regiment of Volunteer Infantry, for the purchase of books on Military History, preference being given to books dealing with the War of the Rebellion, 1861-1865, from

Mrs. Guy Norman	\$100
Through Charles L. Peirson	500
	<hr/>
	\$600

From the estate of Ira D. Van Duzee, \$4,905.42, being his bequest to Harvard College "in trust to use the income to aid in the support and education of one worthy student, the fund to be known and recognized as the Ira D. Van Duzee Scholarship."

From Frederick Cheever Shattuck, \$8,000 additional, the final payment on account of his offer of \$25,000 to establish "The Henry P. Walcott Fellowship in Clinical Medicine."

In memory of Julian Palmer Welsh, \$650 additional, for the memorial fund established in 1910, which is to accumulate until it amounts to \$3,000. "The income of the fund is then to be spent in buying for the Harvard College Library books in English and American literature, two subjects in which Mr. Welsh was much interested. The income of this fund is, however, to be charged on demand with the expense (not to exceed \$100) of designing and engraving a book-plate."

From the estate of Jerome Wheelock, of Worcester, Mass., \$10, the eighth payment of that amount for establishing the Jerome Wheelock Fund of \$100,000.

From the estate of Miss Florence E. Wilder, \$2,000, being her bequest for a prize to be known as "The Elizabeth Wilder Prize," the income to be given annually to freshmen needing financial aid who pass the highest examination in German at the mid-year examination.

From the estate of Charles J. Wister, \$800, "the income to be awarded each year to the student who passes his examination with the highest combined average in mathematics and music, the same to be designated 'The Wister Prize' and be awarded in money or a medal at the option of the recipient."

The total amount of these gifts for capital account is \$1,283,138.02, as shown in Exhibit A.

EXHIBIT E

GIFTS FOR IMMEDIATE USE

June 30, 1911

From Edwin H. Abbot, \$400, in accordance with the terms of his letter of gift, to be added to the income of the Teachers' Endowment Fund.

From John S. Ames, \$350 additional, for the purchase of apparatus for certain courses in Botany.

Through Thomas Dwight, \$500 additional, for anatomical research.

From anonymous donors, \$545, towards the work of The Cancer Commission of Harvard University.

From an anonymous giver, \$100, towards defraying the traveling expenses of members of the Faculty of Arts and Sciences.

From an anonymous giver, securities valued at \$25,000, for an additional building to the Harvard Union in memory of Francis Hardon Burr.

From an unknown donor, \$500, "for extra musical expenses."

From an anonymous friend of the University, \$500, to pay tuition fees of three members of the Class of 1915.

From anonymous friends of the University, \$250, to be awarded to a student of the fourth-year class of the Law School who, in the opinion of the Faculty, gives promise of ability to do effective work in the investigation of problems of law reform. The student will be required to write a dissertation embodying the results of his study.

From an anonymous giver, \$600 additional, for a Fellowship in the Graduate School of Arts and Sciences, for the study of Central American Archaeology and Ethnology.

From an anonymous giver, \$150, towards defraying the expenses in 1910-11 of a certain student in the Graduate School of Arts and Sciences.

From an anonymous giver, \$150, to be utilized as a loan fund for fourth-year students or recent graduates of the Medical School to help defray expenses incident to their hospital service.

From an anonymous giver, \$300, to pay for eight lectures on "The Principle of Relativity" in physics, given in the spring of 1911 in Cambridge by Professor Gilbert N. Lewis, of the Massachusetts Institute of Technology.

From an anonymous giver, \$350, for the Ricardo Prize Scholarship for 1911-12.

From an anonymous giver, \$10,000, for the rebuilding and extension, as well as the furnishing of the Library of the Gray Herbarium.

From an anonymous giver, \$1,000, "to Harvard University," upon certain defined conditions.

From an anonymous giver, \$300, "to increase a salary in the Medical School."

From an anonymous friend of the University, \$400, to be added to a certain fellowship.

From an anonymous giver, \$2,000, to meet certain expenses at the College Library.

From an anonymous giver, \$250, for the salary of a secretary for The Cancer Commission of Harvard University.

From an anonymous giver, \$200, to secure a certain salary under The Cancer Commission of Harvard University.

From an anonymous giver, \$50, to be used as the income of Scholarship Funds is used.

From an anonymous giver, \$3,500, "for immediate use by the Department of Social Ethics."

To increase the income of the Arnold Arboretum for the year 1910-11, from

Mrs. George R. Agassiz	\$1,000	Amount brought forward	\$2,200
Thomas Allen	100	Miss Mary S. Ames	200
Frederick L. Ames	1,000	Oliver Ames	100
John S. Ames	100	Charles W. Amory	100
<hr/>		<hr/>	
Amount carried forward	\$2,200	Amount brought forward	\$2,600

For present use at the Botanical Museum, from

Anonymous	\$50
Anonymous	1,500
Anonymous	1,500
	<u>\$3,050</u>

For the botanical exploration of Western China, begun in 1906 by Ernest Henry Wilson, on behalf of the Arnold Arboretum, from

Sundry subscriptions from persons in England, through F. R. S. Balfour	\$3,394.92
James Veitch and Sons	1,473.85
	<u>\$4,868.77</u>

From W. Graham Bowdoin, Jr., \$250, for the "W. Graham Bowdoin, Jr. Scholarship" for 1910-11.

From Miss Abby A. Bradley, \$600 additional, to be added to the income of the William L. Bradley Fund for the Arnold Arboretum.

From Heman Merrick Burr, \$90, "for the benefit of the University."

From Adolphus Busch, \$100,000 additional, for the Germanic Museum.

Towards meeting the third year's expenses of the Graduate School of Business Administration, in accordance with the pledges which made the undertaking possible, from

Oliver Ames	\$500	Amount brought forward	\$21,350
George F. Baker, Jr.	100	Henry S. Howe	100
Walter C. Baylies	500	A. Lawrence Lowell	1,000
Charles S. Bird	500	George S. Mandell	500
J. A. Lowell Blake	500	J. Pierpont Morgan, Jr.	1,000
Edward D. Brandegee	100	Nathaniel C. Nash	100
Allston Burr	100	Bradley W. Palmer	100
Benjamin P. Cheney	1,000	George L. Peabody	200
Charles A. Coffin	200	James H. Proctor	100
"E"	1,000	Estate of William B. Rice	500
Estate of Robert D. Evans	1,000	Horace S. Sears	200
Charles S. Fairchild	500	Herbert N. Straus	} 500
William A. Gaston	100	Jesse I. Straus	
General Education Board	14,750	Percy S. Straus	
Robert Goelet	250	Members of the Class of 1879	1,000
Robert Walton Goelet	250		
			<u>\$26,650</u>

Amount carried forward . \$21,350

For the general purposes of the Graduate School of Business Administration, from

H. W. Cannon	\$50
William J. Curtis	100
A. Lowes Dickinson	100
George L. Duval	100
Franklin MacVeagh	50
Charles E. Mason	100
Frederick W. Taylor	150
	<u>\$650</u>

From Warren Delano Robbins, \$100, to be applied to expenses of work in South America, in connection with the Graduate School of Business Administration.

From Daniel Waldo Field, \$500, towards the equipment of the reading-room of the Graduate School of Business Administration.

For present use at the Bussey Institution, from

Carroll Dunham	\$100
James L. Little	23
	<u>\$123</u>

Towards the erection and maintenance of the new Cancer Hospital, \$40,000, from sundry subscriptions through J. Collins Warren.

From the Carnegie Foundation for the Advancement of Teaching, \$37,971.69, to pay retiring allowances granted by the Executive Committee of this Foundation to persons connected with Harvard University.

Towards the support at Harvard University of Chinese students in addition to the sixteen students sent in 1906-07 by the Chinese Government, from

Henry L. Higginson	\$1,500
Miss Ellen F. Mason	1,000
	<u>\$2,500</u>

From Joseph H. Clark, \$13.25, for binding books presented by him to the College Library.

From the Classical Association of New England, \$25, towards the travelling expenses of a member of the Commission on Latin Entrance Requirements.

From the Department of the Classics, \$200, in part payment of advances by the President and Fellows for the purchase of books for the Classical Library.

From the Department of the Classics, \$150, for an additional University Scholarship for 1911-12.

To be added to the income available for the payment of salaries in the College, from

Mrs. Edward D. Brandegee	\$500
D. Crawford Clark	250
Amos Tuck French	500
Alfred W. Hoyt	500
	<u>\$1,750</u>

From Archibald Cary Coolidge, \$1,000 additional, for the payment for services at the College Library.

From Archibald Cary Coolidge, \$600, for the payment for additional services at the College Library.

From Archibald Cary Coolidge, \$150, for an additional University Scholarship in History in the Graduate School of Arts and Sciences, for 1910-11.

From William T. Councilman, \$1,775, to be used for the Pathological Laboratory.

For the use of the Division of Forestry, from

John S. Ames	\$200	Amount brought forward . .	\$2,335
Oakes Ames	200	David Pingree	1,000
Edward W. Atkinson	50	Mrs. Henry S. Russell	100
William Bacon	100	Miss Marian Russell	100
Blanchard Lumber Company	25	Sabin P. Sanger	250
Edward D. Brandegee	100	Charles O. Skinner	10
Peter C. Brooks	100	A. T. Stearns Lumber Com-	
I. Tucker Burr	500	pany	100
Norman Cabot	20	E. Stetson Lumber Co.	250
Mrs. Edward M. Cary	100	Stone Lumber Company	10
Walstein R. Chester	25	Nathaniel H. Stone	100
J. Randolph Coolidge	50	John E. Thayer	200
George H. Davenport	100	Washington B. Thomas	100
Mrs. Robert D. Evans	200	Henry O. Underwood	500
W. Cameron Forbes	200	Eliot Wadsworth	100
Waldo E. Forbes	200	John W. Weeks	100
Charles C. Gardiner Lumber		William P. Wharton	100
Company	50	Robert Winsor	50
Charles Holyoke	15	John M. Woods and Company . .	50
Amory A. Lawrence	100		<u>\$5,455</u>
Amount carried forward . .	\$2,335		

From John Craig, \$500, \$250 thereof for a prize in Dramatic Composition and \$250 for the purchase of books on the History of the English Drama, for the College Library.

For the purchase of land, the erection of buildings, or the endowment of education and research, for the benefit of the Dental School, from

Amos I. Hadley	\$200
Murdoch C. Smith	75
	<u>\$275</u>

From Lawrence W. Baker, \$100, to forward original research in the Dental School.

From Mrs. Henry Draper, \$4,800 additional, to be spent by the Director of the Observatory in prosecuting the researches in the photography of stellar spectra with which the late Dr. Henry Draper's name is honorable associated.

From the estate of J. Rayner Edmands, \$1,000, "for the Phillips Library or for such other application to the plant and operations of the astronomical observatory as the Director may determine."

For the use of the Department of English in publishing such contributions, either by students or instructors at Harvard, as may seem to merit preservation in permanent form, from

Laird Bell	\$25	Amount brought forward . .	\$700
William C. Boyden	25	Albert Matthews	50
Frederick I. Carpenter	50	John T. Morse, Jr.	150
George G. Crocker	50	Dudley L. Pickman	50
Edgar C. Felton	50	Mrs. Robert S. Russell	150
Frederick P. Fish	50	Lawrence E. Sexton	150
Samuel Hill	50	Moorfield Storey	50
Henry S. Howe	50	Francis J. Swayze	50
George G. Kennedy	50	Charles H. Tweed	50
George L. Kittredge	150	Kenneth G. T. Webster	50
Mrs. George L. Kittredge	50	George Wigglesworth	50
William Caleb Loring	50	Moses Williams	50
George D. Markham	50		<u>\$1,550</u>
Amount carried forward . .	\$700		

Towards the salary of an Instructor in the Department of Education, from

Mrs. Walter Channing	\$200
Joseph Lee	2,300
	<u>\$2,500</u>

Towards the purchase of a painting of The Holy Family attributed to Bonifazio, for The William Hayes Fogg Art Museum, from

Denman W. Ross	\$100
Charles C. Walker	100
	<u>\$200</u>

Towards the Degas exhibition at The William Hayes Fogg Art Museum, from

Francis Bullard	\$10.00
Archibald Cary Coolidge	10.00
John T. Coolidge, Jr.	10.00
J. Randolph Coolidge, Jr.	25.00
Horatio G. Curtis	10.00
Francis G. Fitzpatrick	15.00
Edward W. Forbes	23.98
Denman W. Ross	25.00
	<u>\$128.98</u>

Towards the fund for the erection of the Harvard Freshman dormitories, from

Frederick Ayer	\$1,000	Amount brought forward	\$20,300
Francis B. Biddle	5	Charles H. Krumbhaar, Jr.	25
Charles C. Binney	100	William F. Kurts	50
William W. Bodine	25	Percival Lowell	250
Henry C. Brengle	100	M. Phillips Mason	25
John W. Brock, Jr.	25	Charles E. Morgan, 3d	25
John D. Brown	50	Kent Packard	2
Henry D. Bushnell	5	Howard M. Paull	2
Herbert L. Clark	1,000	Richard A. F. Penrose, Jr.	100
Percy H. Clark	200	Earl B. Putnam	100
Sydney P. Clark	1,000	Evan Randolph	10
Charles A. Coffin	5,000	Henry W. Schurr	5
Edward K. Davis	5	Philip L. Spalding	100
Edgar C. Felton	500	Clarke Thomson	1,000
Theodore Frothingham	1,000	Charlemagne Tower	200
Nathan Hayward	200	Mrs. Andrew C. Wheelwright	200
William H. R. Hilliard	10,000	Clement B. Wood	40
Robert H. Hutchinson	25	Howard Wood, Jr.	20
Edward E. Jenkins	60	William Woodward	10,000
Amount carried forward	\$20,300		<u>\$32,454</u>

From Franklin W. Moulton, \$25, for loans to Freshmen.

From Otto H. Kahn, \$1,000, for the purchase of reproductions of German art for the Germanic Museum, preferably toward the purchase of a bronze cast of the Schiller-Goethe monument at Weimar.

Towards a new chemical laboratory, in memory of Wolcott Gibbs, LL.D., Rumford Professor and Lecturer on the Application of Science to the Useful Arts, from 1863 to 1887, from

Walter C. Baylies	\$1,000
Mrs. Edward M. Cary	2,000
John T. Davis	100
Mrs. J. Malcolm Forbes	500
Henry S. Howe	500
Amory A. Lawrence	1,000
Miss Fanny P. Mason	500
Robert Saltonstall	500
Stephen M. Weld	495
Robert Winsor	500
	<hr/>
	\$7,095

For two travelling scholarships to be awarded to students in Mining and Metallurgy doing the regular work of the first year in the Graduate School of Applied Science, from

Edgar C. Felton	\$56.00
John Hays Hammond	55.56
Albert F. Holden	55.56
Hennen Jennings	55.56
Richard A. F. Penrose, Jr.	55.56
Charles P. Perin	55.56
Quincy A. Shaw	55.00
Frank H. Taylor	55.56
Benjamin B. Thayer	55.56
	<hr/>
	\$499.92

For the Gray Herbarium, from

Rodolphe L. Agassiz	\$10	Amount brought forward	\$220
Thomas Allen	10	Edward M. Brewer	10
Miss Mary S. Ames	10	William Brewster	10
Anonymous	50	Addison Brown	10
Anonymous	25	Mrs. William S. Bullard	10
Anonymous	25	Allston Burr	20
Edwin F. Atkins	10	"E. S. C."	25
Walter C. Baylies	10	"F. H. C."	10
Thomas P. Beal	10	Mrs. James B. Case	10
Arthur C. Bent	10	Horace D. Chapin	10
Mrs. Arthur W. Blake	10	Miss Cora H. Clarke	10
Francis Blake	10	Miss Louise H. Coburn	10
William P. Blake	10	Mr. and Mrs. James M. Codman	10
Mrs. John L. Bremer	10	Miss Helen Collamore	10
Miss Sarah F. Bremer	10	George G. Crocker	10
	<hr/>		<hr/>
Amount carried forward	\$220	Amount carried forward	\$385

FOR THE GRAY HERBARIUM (*continued*)

Amount brought forward . . .	\$385	Amount brought forward . . .	\$1,050
Mrs. Charles P. Curtis . . .	10	Miss Katharine P. Loring . . .	10
Henry P. Curtis	10	Miss Louisa P. Loring . . .	10
Frank A. Day	25	Mrs. William Caleb Loring . .	20
Walter Deane	15	Mrs. Thornton K. Lothrop . .	10
William Endicott	10	Mrs. George G. Lowell . . .	10
William Endicott, Jr. . . .	50	Arthur T. Lyman	10
Arthur F. Estabrook	100	Mrs. Gilbert N. MacMillan . .	10
Charles F. Fairbanks	10	Miss Ellen F. Mason	10
Dudley B. Fay	10	Miss Fanny P. Mason	10
Frederick P. Fish	10	Thomas Minns	10
Mrs. W. Scott Fitts	10	Mrs. Samuel T. Morse	10
Francis A. Foster	10	Nathaniel C. Nash	10
Francis C. Foster	20	Grenville H. Norcross	10
Mrs. Francis C. Foster	15	Mrs. Otis Norcross, Jr. . . .	10
Miss Harriet E. Freeman . . .	10	Charles W. Parker	10
Miss Cornelia A. French . . .	10	Miss Mary R. Peabody	10
Robert H. Gardiner	10	Charles L. Peirson	25
George A. Goddard	10	Mrs. Anna T. Phillips	10
Mrs. William H. Gorham	20	Mrs. Dudley L. Pickman . . .	10
Miss Harriet Gray	10	David Pingree	20
Mrs. Henry S. Grew	10	Laban Pratt	5
Mrs. Augustus Hemenway . . .	10	Miss Elizabeth Putnam	5
Miss Clara Hemenway	10	Mr. and Mrs. George Putnam .	25
Miss Annie P. Henchman . . .	5	Miss Sarah E. Read	10
Joseph P. B. Henshaw	10	Mrs. William Howell Reed . .	10
Thomas Wentworth Higginson .	5	George E. Richards	10
Miss Rose Hollingsworth . . .	5	William L. Richardson	25
Henry Hornblower	10	Denman W. Ross	10
Miss Katharine Horsford . . .	25	Mrs. M. Denman Ross	10
Clement S. Houghton	20	Mrs. Waldo O. Ross	10
Miss Elisabeth G. Houghton . .	10	Mrs. Robert S. Russell	10
Henry S. Howe	10	Mrs. J. Montgomery Sears . .	10
Charles W. Hubbard	10	Mrs. Knyvet W. Sears	10
Mrs. John E. Hudson	5	Mrs. Phillip H. Sears	10
Henry S. Hunnewell	25	Mrs. G. Howland Shaw	10
Walter Hunnewell	10	David N. Skillings	10
Bernard Jenney	10	Francis Skinner	10
Edward C. Johnson	10	Francis P. Sprague	10
Frank L. Kennedy	5	Isaac Sprague	10
Charles A. Kidder	10	Mrs. Isaac Sprague	10
David P. Kimball	10	Nathaniel H. Stone	10
Mrs. David P. Kimball	10	John E. Thayer	100
Miss Lulu S. Kimball	10	Miss Abby W. Turner	10
Erasmus D. Leavitt	10	Charles H. Tweed	10
George V. Leverett	25	Charles C. Walker	10
Mrs. George Linder	10	Miss Caroline E. Ward	10
Amount carried forward . . .	\$1,050	Amount carried forward . . .	\$1,655

FOR THE GRAY HERBARIUM (*continued*)

Amount brought forward . . . \$1,655	Amount brought forward . . . \$1,735
Miss Cornelia Warren . . . 10	Mrs. Charles T. White . . . 10
Benjamin L. Watson . . . 10	George Wigglesworth . . . 10
Frank G. Webster . . . 25	Miss Adelia C. Williams . . . 25
Mrs. Frank G. Webster . . . 25	John D. Williams . . . 20
Stephen M. Weld . . . 10	Miss Mary Woodman . . . 10
Amount carried forward . . . \$1,735	\$1,810

From Jerome Davis Greene, \$300, for a special scholarship to be called the "Mary Forbes Greene Scholarship for 1910-11."

From the Harvard Alumni Association, \$50, towards certain travelling expenses incurred in connection with the College.

From the Committee on the Regulation of Athletic Sports, \$5,000, to be added to its previous gifts for improvements upon, and additions to, The Soldier's Field, to be made by said Committee, with the approval of the Corporation.

From the Harvard Club of Boston, \$1,000, for five scholarships of \$200 each, to be given to successful candidates from the High Schools of Greater Boston, including the Roxbury Latin, for the year 1911-12.

From the Harvard Club of Chicago, \$420, for the scholarship of the Club for 1909-10 and 1910-11.

From the Harvard Club of the Connecticut Valley, \$200, for the scholarship of the Club for 1910-11.

From the Harvard Club of Fitchburg, \$150, for the scholarship of the Club for 1910-11.

From the Harvard Club of Hawaii, \$200, for the scholarship of the Club for 1910-11, "the award to be made with the understanding that it is a loan, repayable after a term of years."

From the Harvard Club of Hingham, \$100, for the scholarship of the Club for 1910-11.

From the Harvard Club of Indiana, \$200, for the scholarship of the Club for 1910-11.

From the Harvard Club of Lawrence, \$100, the first payment for a scholarship for 1910-11.

From the Harvard Club of Lowell, \$300, for two scholarships of \$150 each, for the year 1910-11, the beneficiaries to be nominated by the Committee of the Club.

From the Harvard Club of Lynn, \$100, for the scholarship of the Club for 1910-11.

From the Harvard Club of Milwaukee, \$200, for the scholarship of the Club for 1910-11.

From the Harvard Club of Nebraska, \$150, for the scholarship of the Club for 1910-11.

From the Harvard Club of New Jersey, \$250, the third of three annual prizes of this amount to be awarded to that student from New Jersey who enters the Freshman Class in Harvard College with the highest credit in his examinations for admission.

From the Harvard Club of Western Pennsylvania, \$300, for the scholarship of the Club for 1910-11.

From the Harvard Club of Rochester, New York, \$200, for the scholarship of the Club for 1911-12.

From the Harvard Club of San Francisco, \$500, for the scholarship of the Club for 1910-11.

From the Harvard Club of Washington, D. C., \$101 additional, towards the maintenance of the scholarship of the Club for three years, beginning with 1909-10.

From the Harvard Club of Worcester, Mass., \$200, for the scholarship of the Club for 1910-11.

From members of the Harvard Engineering Society of New York, \$500, the second instalment of the "Student Fund of the Harvard Engineering Society of New York," to be loaned to students of engineering who are unable to meet the expenses of the summer courses in surveying, shopwork, and mining.

Towards refitting Holworthy Hall, from

Heman M. Burr	\$50
I. Tucker Burr	100
T. Jefferson Coolidge, Jr.	60
William A. Gaston	100

Amount carried forward \$310

TOWARDS REFITTING HOLWORTHY HALL (*continued*)

Amount brought forward	\$310
Edward W. Grew	25
Herbert C. Leeds	25
William Caleb Loring	200
George B. Ogden	100
Matthew V. Pierce	50
Ellery Sedgwick	100
Arthur M. Sherwood	100
Thomas C. Thacher	25
Robert D. Wrenn	50
	<hr/>
	\$985

From anonymous friends of the University, \$200, for the Huidekoper Scholarship for 1910-11.

From James H. Hyde, \$600, for the Fellowship of the Cercle Français de l'Université Harvard for 1910-11.

For the investigation of Infantile Paralysis, conducted by and under the direction of Dr. Theobald Smith, from

Francis R. Bangs	\$50
Edward D. Brandegge	200
Frederick S. Converse	1,000
William H. Coolidge	100
Charles H. W. Foster	250
William H. Hill	100
Charles Jackson	1,000
Charles C. Jackson	1,000
Robert T. Paine, 2d	100
Frederick P. Royce	25
Frederic Schenck	50
Moses Williams	50
Moses Williams, Jr.	50
	<hr/>
	\$3,975

For the purchase of books for the College Library, from

Mrs. R. L. Adlercron, for books on Japan	\$600.00
Anonymous, for books on Algiers	10.00
Anonymous, for books on Art	500.00
Anonymous, for books on English Literature	53.05
Anonymous, for books on Oceanic Linguistics	25.00
Robert Bacon	100.00
Thomas Barbour, for books on Oceania	35.00
Harold W. Bell, for a set of the Numismatic Chronicle	137.00
	<hr/>

Amount carried forward \$1,460.05

FOR THE PURCHASE OF BOOKS FOR THE COLLEGE LIBRARY (*continued*)

Amount brought forward	\$1,460.05
Alexander Cochrane	1,000.00
Archibald Cary Coolidge, for books on the History of France, and other subjects	2,137.48
Harold J. Coolidge, for books on China	50.00
Henry W. Cunningham	100.00
James F. Curtis, for books relating to the South	50.00
Estate of W. Bayard Cutting, Jr., for books on Flor- ence	25.00
for books on Switzerland	25.00
for books relating to Napoleon or to the Napoleonic period	100.00
Dante Society	50.00
James Lloyd Derby, for books on the Philippine Islands	25.00
Ellis R. Dresel, for books on German Drama	50.00
William Endicott, Jr.	1,500.00
Department of English, for books in English literature	132.39
Jerome D. Greene, for a subscription to the "Japan Mail"	27.00
Editors of "The Harvard Crimson," in memory of their president, Fabian Fall, 1910, for extra books needed in large courses	250.00
William Thorn Kiesel	5.00
George L. Kittredge, for books illustrating the history of Witchcraft	100.00
James Loeb, for "Labor Periodicals"	100.00
Edward P. Merritt	100.00
Godfrey Morse	50.00
Edwin Stanton Mullins, for books on Folk-lore	50.00
Walter W. Naumburg, for books on Shakespere	200.00
William A. Neilson	6.31
Evan Randolph, for Encyclopaedia Britannica	100.00
Saturday Club, of Boston, Mass.	600.00
Horace B. Stanton, for the Molière Collection	25.00
Henry Stephens, 3d, for a set of the "Codex diplo- maticus Hungariae ecclesiasticus ac civilis"	550.00
James A. Stillman	100.00
Fund of the Twentieth Massachusetts Regiment	361.35
Horace E. Ware, for books on Comparative Philology	100.00
George Wigglesworth	100.00
Lucius Wilmerding, "to be used for the purchase of books at the sale of the library of Robert Hoe"	150.00
	<u>\$9,679.58</u>

From friends, in memory of Henry Weidemann Locke, S.B.
1902, \$100 additional, for a scholarship for 1910-11 in Electrical
Engineering in the Graduate School of Applied Science.

From Trustees under the will of Miss Harriet N. Lowell, of Boston, Mass., \$4,000, the third and fourth payments under the following provision of her will:

"The remaining part of said net income shall during the life of the said . . . be paid in annual payments to the President and Fellows of Harvard College, in Cambridge, in said Commonwealth, to be used by the Medical Department of said College for scientific study and investigation in any department of surgery, and into the cause, treatment, prevention and cure of disease, including dental surgery and pathology, either in this country or in Europe or wherever such study and investigation may be most advantageously pursued."

To establish a Fellowship in Dramatic Composition to be called The MacDowell Fellowship, which may be held by a student of Harvard or Radcliffe, selected after open competition, by Professor George P. Baker of the English Department and accepted as holder of the Fellowship by the MacDowell Club of New York, from

George P. Baker	\$50
The MacDowell Club of New York	550
	<u>\$600</u>

From John Francis Manning, \$50, to be added to the account "Lawrence Scientific School Loans Returned" to be loaned to a student in the Mining course who is recommended by some of the Instructors in that Department not merely for high marks but because he gives promise of making a practical, active Mining Engineer.

From Philippe Belknap Marcou, \$50 additional, for a prize for French Composition, to be called the Jeremy Belknap Prize, as a memorial to Dr. Jeremy Belknap of the Class of 1762.

From the Massachusetts Society for Promoting Agriculture, \$2,000 additional, "to be expended at the Arnold Arboretum by the Director, to increase the knowledge of trees."

From the Massachusetts Society for Promoting Agriculture, \$1,200 additional, "to aid the College to enable Professor Theobald Smith to continue his experiments on bovine tuberculosis
* * * ."

From J. Ewing Mears, \$225, his second annual gift in accordance with the terms of his offer to establish a scholarship with an income of \$225 a year, to be designated "The James Ewing Mears, M.D. Scholarship in Medicine," to be held by the beneficiary "for the full course of four years in the Medical School, subject to the standing he shall maintain in scholarship and to his good conduct as a student."

For three Zeiss microscopes, a paraboloid condenser, microtome and knife, and other apparatus, for the Medical School, \$807.20 from

Richard Sisson Austin,
Alexander Maulins Burgess,
Oliver Street Hillman,
Archibald William Hunter,
Daniel Joseph Hurley,
Halsey Beach Loder,
Frank Burr Mallory.

From members of the Class of 1879 of the Harvard Medical School, \$70 additional, to be added to "The Loan Fund of the Medical Class of 1879."

Towards the construction, at the Harvard Medical School, of tennis courts, squash courts, etc., for students' exercise, from

Through Henry S. Forbes	\$800
Frederick C. Shattuck	100
George B. Shattuck	50
	<hr/>
	\$950

To be added to the income available for the payment of salaries in the Medical School, from

Henry L. Higginson	\$5,000
William H. Walker	1,000
	<hr/>
	\$6,000

From Maurice H. Richardson, \$800, towards defraying the expenses of the animal house erected for the Surgical Department of the Medical School.

From John F. Moors, \$50, to be used for a certain scholarship for 1911-12.

For the use of the Division of Music, from

"An unknown donor"	\$150
Percy L. Atherton	35
W. Kirkpatrick Brice	125
Frederick S. Converse	30
Carroll Dunham	25
Arthur Foote	30
Edward B. Hill	15
Philip L. Spalding	50
	<hr/>
	\$460

From James J. Putnam and Moorfield Storey, Trustees, \$1,400 additional, towards the expenses of the Department of Neuropathology.

For the benefit and use of the Department of Neuropathology in the Medical School, from

Miss Katherine E. Bullard	\$500
William N. Bullard	200
Mrs. William S. Bullard	500
	<hr/>
	\$1,200

For the Peabody Museum of American Archaeology and Ethnology, from

"A Friend"	\$250.00
Anonymous	5,500.00
Mrs. E. N. Baylies	25.00
J. A. Lowell Blake	750.01
Clarence B. Moore	500.00
Miss Mary Lee Ware	480.00
	<hr/>
	\$7,505.01

From a friend, \$75, for the Peabody Museum of American Archaeology and Ethnology, to be used towards the Explorations in the Delaware Valley.

From Henry W. Haynes, \$55, his third annual gift of this amount to the Peabody Museum of American Archaeology and Ethnology, for the general purposes of the library, including binding current serials.

From John C. Phillips, \$86, for the purchase of a new typewriter for the library of the Peabody Museum of American Archaeology and Ethnology.

From John B. Stetson, Jr., \$150 additional, for books for the library of the Peabody Museum of American Archaeology and Ethnology.

From Mrs. William Hooper, \$500, the first payment on account of her offer of \$1,000 a year, in memory of her father, Charles Elliott Perkins, for the purchase of books and material bearing on the history and development of that part of America which lies beyond the Alleghanies.

From Edward Dyer Peters, \$250, his fourth gift of like amount, for a scholarship in Mining and Metallurgy in the Graduate School of Applied Science for the year 1911-12.

From John C. Phillips, \$3,000 additional, to be used under the direction of the Shattuck Professor of Pathological Anatomy, the Associate Professor of Pathological Anatomy and the donor, for work in the Department of Pathology.

From John C. Phillips, \$200, for the payment for services at the University Museum.

From the Division of Philosophy, \$50, for the Library of Philosophy in Emerson Hall.

From Reginald C. Robbins, \$150, for the purchase of books for the Library of Philosophy in Emerson Hall.

From two anonymous givers, \$300, towards a Scholarship in Philosophy for 1910-11.

From Theodore Lyman, \$200, for the salary of an Assistant in Physics for 1910-11.

From Edward C. Pickering, \$3,000 additional, for immediate use at the Observatory.

From John Winthrop Platner, \$250, "for use in any department of the College work where it may be needed."

For the Department of Political Economy, from

Anonymous	\$200
Arthur T. Lyman	500
Washington B. Thomas	100
Henry O. Underwood	500
	<hr/>
	\$1,300

From Murray Anthony Potter, \$225, in memory of his mother, for two prizes in Comparative Literature, to be called the "Susan Anthony Potter Prizes," and a prize in Spanish Literature of the Golden Age.

From Andrew W. Preston, \$3,333.33, to defray the cost of giving instruction in Central and South American Economics, Resources, and Commercial Organization, in the Graduate School of Business Administration and also in the High School of Commerce at Boston. This sum, together with \$666.66, which has been given to the High School of Commerce, comprises the first two instalments of five yearly payments of two thousand dollars each.

The arrangement for the common utilization of this gift between the two institutions is as follows: during the year from September 1, 1909, to September 1, 1910, \$666.66 goes to the High School of Commerce to assist in meeting the expenses of two travelling scholarships, and the balance, \$1,333.33, is used at Harvard for the expenses of a course of lectures by experts in South American Trade conditions. After the year 1909-10, and beginning with September 1, 1910, the full sum of two thousand dollars goes to the Treasurer of Harvard University annually for four years, to pay the salary of a lecturer on South American Economics, Resources, and Commerce.

During the first of the four years the two thousand dollars will be used to pay the lecturer's expenses for an extended visit to various South American Countries. He will return to give instruction both at Harvard and in the Boston High School of Commerce. It is understood that he will give one-third of his time to the teaching of this subject in the High School of Commerce. The rest of his time will be devoted to the Graduate School of Business Administration at Harvard.

From Frederick Madison Allen, \$787.50, for the Department of Preventive Medicine and Hygiene.

From Nelson Robinson, \$15,000, for a certain salary in the Department of Architecture.

From Jacob H. Schiff, \$2,000, one-half for buying and binding books for the Semitic Library, and one-half for the publication

of a volume on the Babylonian tablets belonging to the Museum, any balance to be used for the Semitic Library.

From Horace S. Sears, \$1,700, for the payment of certain lectures given in the Divinity School in 1910-11.

From Mrs. Joshua Montgomery Sears, \$1,500 additional, for the Sears Prizes in the Law School.

From Henry L. Shattuck, \$50 additional, toward the general expenses of undergraduate instruction in Harvard College.

From Francis Skinner, \$3,000 additional, for the purchase of books for the Arnold Arboretum in memory of his father, Francis Skinner, of the Class of 1862.

From Jeremiah Smith, \$250 additional, to be used for aid to students in the same manner as Scholarship Money Returned in the Law School is used.

From the Committee of Fifty, \$300, for the purchase of books relating to the liquor question, for the Library of the Department of Social Ethics.

For the School for Social Workers, from

William S. Bigelow	\$2,000
Joseph Lee	1,250
Mr. and Mrs. Frederick Nichols	500
	<u>\$3,750</u>

From the Society for Promoting Theological Education, \$714.27 additional, "for the purchase of books for the Library of the Divinity School and for the administration of said Library."

For the South End House Fellowship for 1910-11, from

Edward D. Brandegee	\$100
Frederick P. Cabot	10
Archibald Cary Coolidge	10
Mrs. W. Scott Fitz	100
Randolph C. Grew	100
Augustus Hemenway, Jr.	25
Robert Homans	3
Francis Welles Hunnewell, 2d	20
Frank Lowell Kennedy	5
Frederick Law Olmsted	5
Charles Weil	5
Alexander Whiteside	10
Robert A. Woods	7
	<u>\$400</u>

For the South End House Fellowship in Social Education for the year 1910-11, from

Randolph C. Grew	\$100
Through James Hardy Ropes	200
	<hr/>
	\$300

From Joseph E. Sterrett, \$100, for the purchase of books or other material relating to accounting, for the Graduate School of Business Administration.

To forward original work in the Laboratory of Surgical Research, from

John S. Ames	\$1,000.00
Anonymous	50.00
Through Robert B. Greenough	25.00
John Homans	5.20
John C. Phillips	25.00
	<hr/>
	\$1,105.20

From John E. Thayer, \$500 additional, for the Bermuda Biological Station for Research.

From Frank Graham Thomson, \$5,000 additional, for instruction in Municipal Government.

To pay the tuition of a certain student for 1911-12, from

William F. Bacon	\$10
Edward E. Blodgett	10
Grosvenor Calkins	10
William H. Coolidge	10
Clift Rogers Clapp	10
William R. Dewey	10
Clinton L. Eddy	10
Robert S. Gorham	10
Percy S. Howe	10
James A. Lowell	10
George R. Pulsifer	10
Waldron H. Rand, Jr.	10
Frederick J. Ranlett	10
Alonso R. Weed	10
Edward F. Woods	10
	<hr/>
	\$150

(These gifts have been returned to the givers.)

From Frederick Adams Woods, \$400, for the "Adams Woods Fellowship for the Study of Heredity in American History" for 1910-11.

For present use at the Museum of Comparative Zoölogy, from

Thomas Barbour	\$50
Louis A. Shaw	250
	<hr/>
	\$300

The total amount of these gifts for immediate use is \$462,300.70 as shown in Exhibit B.

SCHEDULE 1

SPECIAL INVESTMENTS

June 30, 1911

UNIVERSITY		Principal.	Net Income.
Walter F. Baker,			
Real Estate in Boston,		\$46,000.00	.....
John W. Carter,			
University Houses and Lands,		12,500.00	\$554.39
George B. Dorr,			
University Houses and Lands,		115,966.56	5,143.35
George Draper,			
University Houses and Lands,		48,458.50	2,149.23
Robert H. Eddy,			
University Houses and Lands,		56,787.00	2,518.60
John Davis Williams French,			
University Houses and Lands,		5,322.09	236.04
John C. Gray,			
University Houses and Lands,		25,000.00	1,108.80
Walter Hastings,			
Real Estate, Sacramento St., Cambridge,		20,000.00	1,510.05
Henry L. Higginson,			
University Houses and Lands,		68,435.45	3,035.25
Insurance and Guaranty,			
Real Estate, Lucas St., Boston,		4,000.00	.....
Joseph Lee,			
University Houses and Lands,		10,000.00	443.52
Henry S. Nourse (part),			
Mortgage on Real Estate in Chicago, Ill. . . . .		.....	110.00
Francis E. Parker,			
University Houses and Lands,		113,817.44	5,048.03
Henry L. Pierce (Residuary) (part),			
Equipment at Memorial Hall		157,098.14	7,099.78
Riverside,			
11 shares Harvard Riverside Associates,		11,000.00	.....
Henry Villard,			
University Houses and Lands,		50,000.00	2,217.60
William F. Weld,			
University Houses and Lands,		100,000.00	4,435.20
Amounts carried forward,		\$844,385.18	\$35,609.84

	Principal.	Net Income.
Amounts brought forward,	\$844,885.18	\$35,609.84
COLLEGE		
Daniel A. Buckley (part),		
Real Estate in Cambridge, Mass.,	66,845.59	7,302.44
" " Deer Isle, Me.,	1.00	.....
George Newhall Clark,		
100 shares St. Joseph R'y, Light, Heat & Power Co.,	10,000.00	500.00
Edward W. Codman (part),		
\$5,000 Kansas City, Fort Scott & Memphis R. R.		
Cons. M. 6's of 1928 (sold during the year), . .	.....	184.83
5,000 Northern Pacific-Great Northern Joint 4's		
(C. B. & Q. collateral) of 1921 (sold during the		
year), . . . . .	.....	133.89
2 shares Pacific Mills,	4,600.00	240.00
15 " Barristers Hall Trust,	1,085.00	60.00
11 " Boston Real Estate Trust,	13,219.50	495.00
25 " Central Building Trust (sold during the		
year), . . . . .	.....	136.67
Edward Erwin Coolidge,		
200 shares U. S. Smelting, Ref. & Mining Co. pref'd,	9,000.00	700.00
T. Jefferson Coolidge, for Research in Physics,		
625 shares Massachusetts Electric Cos., cum. pref'd,	57,500.00	2,500.00
Eliot Professorship (Jonathan Phillips's Gift),		
\$10,000 City of Boston 3½'s of 1920,	10,000.00	350.00
Professorship of Hygiene (part),		
Policy of Mass. Hospital Life Insurance Co., . .	5,000.00	206.25
\$16,000 Northern Pacific-Great Northern Joint 4's		
(C. B. & Q. collateral) of 1921 (sold during the		
year), . . . . .	.....	428.44
6,000 New York Central & Hudson River R.R.		
(L. S. & M. S. Coll.) 3½'s of 1928 (sold during		
the year), . . . . .	.....	180.54
35 shares American Smelting & Refining Co., . .	3,112.22	245.00
50 " American Tel. & Tel. Co.,	5,250.00	400.00
25 " Canadian Pacific,	3,515.00	275.00
40 " Chicago, Milwaukee & St. Paul,	4,000.00	280.00
Charles Eliot Norton Fellowship,		
\$15,000 Northern Pacific-Great Northern Joint 4's		
(C. B. & Q. collateral) of 1921,	14,100.00	700.00
5,000 Louisville & Nashville Unified M. 4's of 1940,	5,000.00	200.00
George Foster Peabody Scholarship,		
\$6,000 Mexican Coal & Coke Co. 1st M., S. F. 5's		
of 1926,	4,800.00	150.00
Amounts carried forward,	\$1,060,913.49	\$51,277.90

SPECIAL INVESTMENTS

47

	Principal.	Net Income.
Amounts brought forward,	\$1,060,918.49	\$51,277.90
Sarah E. Potter Endowment (part),		
100 shares Boston & Albany,	18,500.00	625.00
100 " Massachusetts Electric Cos., cum. pref'd,	4,000.00	400.00
50 " Plymouth Cordage Co.,	10,000.00	550.00
12 " Pureoxia Co.,	60.00	4.80
William Reed Scholarship,		
\$1,000 New York Central & H. R. Gold 3½'s of 1997,	1,000.00	35.00
1,000 Norfolk and Western Divisional 1st lien & gen. M. 4's of 1944,	1,000.00	40.00
2,000 Northern Pacific-Great Northern Joint 4's (C. B. & Q. collateral) of 1921,	2,000.00	100.00
Nelson Robinson Jr. Additional (part),		
1,750 shares Gauley Coal Land Co. preferred,	175,000.00	.....
Eliza O. and Mary P. Ropes (part),		
100 shares Chicago, Milwaukee & St. Paul,	13,087.50	700.00
100 " Northern Pacific,	11,986.50	700.00
200 " Pennsylvania,	11,987.50	600.00
20 " " (50% paid),	500.00	.....
Dunlap Smith Scholarship,		
\$5,000 Metropolitan West Side Elevated R. R. Extension M. 4's of 1938,	4,700.00	200.00
Stoughton Scholarship (part),		
Real Estate in Dorchester,	3,194.80	169.23
Teachers' Endowment (part),		
\$5,000 Broadway Realty Co. Purchase Money, 2d M. 5's of 1916,	5,000.00	250.00
50,000 Wisconsin Central, Minneapolis Terminal Purchase Money M. 3½'s of 1950,	50,000.00	1,750.00
10 shares Harvard Riverside Associates,	10,000.00	.....
Wales Professorship of Sanskrit,		
Real Estate, Cornhill, Boston,	40,000.00	1,658.36
Samuel Ward's Gift (part),		
Ward's (Bumkin) Island, Boston Harbor,	1.00	.....
J. Palmer Welsh Memorial (part),		
\$1,000 Ontario Power Co. 5's of 1948,	1,000.00	50.00
LIBRARY		
William B. Castle,		
\$1,000 Honolulu Gas Co., Limited, 6's of 1925,	1,000.00	60.00
Francis Parkman Memorial (part),		
\$5,000 Louisville & Jeffersonville Bridge 1st M. Gold 4's of 1945,	4,500.00	200.00
Ichabod Tucker (part),		
Policy of Mass. Hospital Life Insurance Co.,	5,000.00	206.25
Amounts carried forward,	\$1,434,430.29	\$59,576.54

	Principal.	Net Income.
Amounts brought forward,	\$1,434,480.29	\$59,576.54
John Harvey Treat (part),		
\$2,000 Bethlehem Steel Corporation 1st M. 5's of 1926 (sold during the year),	28.06	
6,000 Interborough Rapid Transit conv. 6% Notes of 1911 (sold during the year),	180.00	
\$3,000 Tri-City Railway & Light Co. 5's of 1923 (sold during the year),	79.58	
180 Shares Treat Hardware Supply Co.,	6,500.00	390.00
70 " United Shoe Machinery Co.,	4,050.00	
Deposit in Andover Savings Bank (withdrawn),	34.66	
" " Lawrence " "	1,644.76	

MEDICAL SCHOOL

John C. Cutter Bequest,		
6,250 Carthage Water Power Co., 1st M. 5% Notes,	1.00	
Deposit in Spencer Savings Bank,	500.00	
" " Leicester Savings Bank,	578.00	
Calvin and Lucy Ellis (part),		
\$40,000 Northern Pacific-Great Northern Joint 4's (C. B. & Q. collateral) of 1921,	26,585.00	1,600.00
Real Estate in Boston (half interest in),	22,500.00	216.11
Real Estate in Eden, Bar Harbor, Maine,	10,000.00	
Hamilton Kuhn Memorial (part),		
14,000 Burl. & Mo. in Nebr. non-ex. 6's of 1918,	14,570.00	930.00
20,000 Kansas C., Mem. & Birm. Inc. 5's of 1934,	17,600.00	1,000.00
10,000 U. Elec. Sec. Coll. Tr. 5's of 1937, 26th ser.,	10,000.00	500.00
189 shares Edison Elec. Ill'm'ng Co. of Boston,	44,385.00	2,268.00
George C. Shattuck (part),		
\$25,000 Kansas City, Fort Scott & Memphis R. R. Cons. M. 6's of 1928 (\$208.70 deducted from income for sinking premium),	28,463.00	1,396.30
Henry P. Walcott Fellowship in Clinical Medicine (part),		
6,000 J. M. Guffey Petroleum Co. 1st M. 5's of 1912,	6,000.00	300.00
5,000 " " " 1913,	5,000.00	250.00
2,000 " " " 1914,	2,000.00	100.00

MUSEUM OF COMPARATIVE ZOOLOGY

Maria Whitney,		
\$2,000 City of Providence 4's of 1911,	2,000.00	80.00
3,000 " " " 1921 (sold during the year),	110.33	
Alex. Agassiz Bequest, Clause XI,		
Real Estate in Cambridge,	50,000.00	1,129.02
Amounts carried forward,	\$1,686,807.05	\$70,068.60

SPECIAL INVESTMENTS

49

	Principal.	Net Income.
Amounts brought forward,	\$1,686,807.05	\$70,068.60

OBSERVATORY

Advancement of Astronomical Science (1902),		
15 shares Calumet & Hecla Mining Co.,	9,000.00	390.00
Advancement of Astronomical Science (1901),		
Real Estate in Cambridge,	2,476.81	.....

PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY AND ETHNOLOGY

Peabody Building (part),	} \$54,000 Kansas & Mis- souri R. R. 1st M. 5's of 1922,	{	11,512.72	622.82
Peabody Collection (part),			19,218.64	1,088.84
Peabody Professor (part),			19,218.64	1,088.84
Thaw (part) (\$8.47 deducted from income for sinking premium),				
\$20,000 Girard Point Storage Co. 1st M. 3½'s of 1940,			20,245.78	691.58

ARNOLD ARBORETUM

Robert Charles Billings,		
\$5,000 Butte Water Co. 1st M. 5's of 1921,	4,000.00	250.00

BUSSEY INSTITUTION

Woodland Hill,		
Laboratory of Comparative Pathology building, . .	20,658.86	1,000.00

SPECIAL FUNDS

Francis H. Burr Memorial,		
\$19,000 Merrimack Valley Street Railway, 1st M. 5's of 1911 (paid during the year), . . . . .	.....	475.00
6,000 Cleveland, Cincinnati, Chicago & St. Louis R.R. 5% Notes of 1911 (paid during the year), . . . . .	.....	150.00
Bussey Trust (part),		
Real Estate in Boston,	381,972.12	29,798.91
Fund of the Class of 1834,		
Policy of Mass. Hospital Life Insurance Co., . . .	1,000.00	41.25
Fund of the Class of 1844,		
Policy of Mass. Hospital Life Insurance Co., . . .	6,500.00	268.18
Fund of the Class of 1853,		
Policy of Mass. Hospital Life Insurance Co., . . .	3,725.00	153.66
Calvin and Lucy Ellis Aid (part),		
Real Estate in Boston (half interest in),	22,500.00	216.11
Charles L. Hancock Bequest (part),		
Real Estate in Chelsea and Chicago,	65,001.00	4,252.00
Amounts carried forward,	\$2,273,886.62	\$110,455.19

		Principal.	Net Income.
Amounts brought forward,		\$2,278,836.62	\$110,455.19
Anonymous,			
20,000	Massachusetts 3's of 1930,	20,000.00	600.00
5,000	" " 1939,	5,000.00	150.00
19,000	" " 1941,	19,000.00	570.00
4,000	" 3½'s 1915,	4,000.00	70.00
6,000	" " 1916,	6,000.00	105.00
6,000	" " 1917,	6,000.00	105.00
2,000	Massachusetts 3's of 1918,	2,000.00	35.00
5,000	" " 1920,	5,000.00	87.50
10,000	" " 1923,	10,000.00	175.00
5,000	" " 1935,	5,000.00	87.50
12,000	" " 1940,	12,000.00	210.00
7,000	Boston Terminal Co. 3½'s of 1947 (sold during the year), . . . . .	.....	23.82
17,000	City of Springfield 4's of 1914 (sold during the year), . . . . .	.....	149.22
Robert Troup Paine (accumulating) (\$187.38 deducted from income for sinking premiums),			
\$38,000	Massachusetts 3½'s of 1913,	38,361.88	1,185.25
5,000	" " 1916,	5,104.39	154.15
12,000	" " 1935,	12,247.22	409.08
4,000	" " 1938,	4,287.75	129.14
George Smith Bequest (part),			
\$10,000	Duquovn, Ill., Water Works Co. 6's of 1901,	1.00	.....
20,000	Laclede Gas Light Co. 5's of 1919, . . .	20,000.00	1,000.00
32,000	United States Steel Corporation 5's of 1963 (sold during the year), . . . . .	.....	940.70
200 shares	Laclede Gas Light Co., preferred, . . }	18,800.00	1,035.00
20	" " " " " common, . . }		
Frederick Sheldon (part),			
\$2,000	New York Gas & Electric Light, Heat & Power Co. 4's of 1949,	1,300.00	80.00
2,000	Twenty-eighth and Twenty-ninth Street Crosstown Ry. 1st M. 5's of 1996, . . .	500.00	.....
20 shares	Astor Trust Co.,	6,000.00	160.00
23	" Bank of America,	10,350.00	598.00
82	" Consolidated Gas Co. of New York, . . .	6,784.25	451.00
11	" Corn Exchange Bank,	2,750.00	176.00
100	" Manhattan Trust Co.,	12,900.00	360.00
23	" Mexican Telegraph Co.,	4,370.00	230.00
50	" New York Loan & Improvement Co., . . .	6,500.00	325.00
7	" Newport Trust Co.,	1,050.00	28.00
11	" Newport Water Works,	1,100.00	44.00
50	" Ontario Silver Mining Co.,	200.00	.....
60	" U. S. Life Insurance Co.,	1,815.00	126.00
100/15000th	Trust Estate Hastings & Dak. Ry. Co., . . .	300.00	250.00
Amounts carried forward,		\$2,522,508.01	\$120,504.55

SPECIAL INVESTMENTS

51

	Principal.	Net Income.
Amounts brought forward,	\$2,522,508.01	\$120,504.55
Gordon McKay Endowment (part),		
\$120,000 American Tel. & Tel. 4's of 1929,	114,000.00	4,800.00
18,000 Butte Electric & Power Co. 1st M. 5's of 1951,	16,650.00	900.00
20,000 Baltimore & Ohio R'y 3½'s of 1925 (sold during the year), . . . . .	.....	237.28
6,000 Central Branch R'y 4's of 1919,	5,415.00	160.00
70,000 Florida East Coast R'y 1st M. 4½'s of 1959,	66,850.00	507.50
8,000 Freemont, Elkhorn & Mo. Valley R'y 6's of 1923 (sold during the year), . . . . .	.....	345.33
8,000 General Electric Conv. 5's of 1917 (sold during the year), . . . . .	.....	397.78
223,000 Interborough Rapid Transit 5's of 1952, .	227,166.75	6,006.11
221,000 Interborough R.T. Conv. 6% Notes of 1911 (sold during the year), . . . . .	.....	6,555.00
35,000 Kansas City Railway & Light 6's of 1912, .	35,000.00	2,100.00
12,000 Madison River Power Co. 1st M. 5's of 1935,	11,975.00	.....
20,000 Main Central Improv. A, 4½'s of 1916 (sold during the year), . . . . .	.....	1,270.00
45,000 Minneapolis General Electric 5's of 1934 (sold during the year), . . . . .	.....	2,098.34
100,000 Kanawha & Michigan 5's of 1927,	95,500.00	5,000.00
80,000 New York, N. H. & H. Deb. 4's of 1955, .	78,800.00	3,200.00
61,000 N. Pacific-Great N. Joint 4's of 1921, . .	59,780.00	2,440.00
40,000 Puget Sound Electric 5's of 1910 (sold during the year), . . . . .	.....	2,000.00
12,000 Puget Sound Electric 5's of 1932,	11,760.00	600.00
1,000 St. Joseph & Grand Island R'y 4's of 1947,	890.00	28.33
50,000 Seattle Electric Co. 5's of 1911 (sold during the year), . . . . .	.....	1,666.67
50,000 Southern Railway Equip. 4½'s of 1912 (sold during the year), . . . . .	.....	762.50
15,000 Wabash Equip. Serv. Co. 4½'s of 1910 (sold during the year), . . . . .	.....	387.50
25,000 Wabash Equip. Serv. Co. 4½'s of 1915, .	23,800.00	1,125.00
800 shares Great Northern,	44,250.00	2,100.00
240 " Northern Pacific,	35,400.00	1,680.00
150 " Pennsylvania,	10,125.00	450.00
15 " " (50% paid),	375.00	.....
3,000 Washington Water Power Co. 5's of 1939 (sold during the year), . . . . .	.....	67.08
14,000 West End Street R'y 4's of 1915 (sold during the year), . . . . .	.....	233.33
Price Greenleaf. (\$255.57 deducted from income for sinking premiums.) The total amount of this Fund is \$794,898.98, which is invested as follows:		
\$70,000 Broadway Realty Co. Purchase money		
1st M. 5's of 1926,	72,855.24	3,315.80
Amounts carried forward,	\$3,433,100.00	\$170,883.05

SPECIAL INVESTMENTS

	Principal.	Net Income.
Amounts brought forward, . . .	\$3,433,100.00	\$170,833.05
\$9,000 Burl. & Mo. River R. R. in Nebraska non-exempt 6's of 1918,	9,000.00	570.00
21,062.50 Central Crosstown Coll. Trust 5 % Notes of 1909,	20,239.58	.....
43,500 Central Vermont R'y 1st M. 4's of 1920, .	37,845.00	1,740.00
3,000 Chicago, Burl. & Quincy R. R. 4's of 1922, .	2,880.00	120.00
50,000 Chicago Junction Railways & Union Stock Yards Coll. Trust 5's of 1915,	47,000.00	2,500.00
20,000 Cleveland R'y Ref. M. 5's of 1931, . . .	20,000.00	.....
30,000 Commonwealth Power Co. 1st M. 5's of 1924, .	29,350.00	391.67
8,000 Kansas City, Fort Scott & Memphis cons. M. 6's of 1928,	9,213.35	408.63
50,000 Metropolitan Tel. & Tel. Co. 1st M. 5's of 1918, .	49,750.00	2,500.00
34,000 New York Central & Hudson River R. R. (Michigan Central Collateral) 34's of 1928, .	28,412.10	1,190.00
32,000 Northern Pacific-Great Northern Joint 4's (C. B. & Q. collateral) of 1921,	19,993.55	1,280.00
50,000 Seattle Electric Co. 5 % Notes of 1911 (sold during the year), . . . . .	.....	2,500.00
50,000 Union Pacific R.R. 1st M. & L.G. 4's of 1947, .	44,625.00	2,000.00
50,000 Note of Arlington Mills,	50,000.00	2,261.11
25,000 " " Hamilton Manufacturing Co., . .	25,000.00	1,218.75
50,000 " " Massachusetts Cotton Mills, . .	50,000.00	2,250.00
380 shares Boston & Lowell R. R.,	46,800.00	2,890.00
237 " Fitchburg R. R., preferred,	22,306.27	1,185.00
56 " Great Northern, preferred,	18,125.00	392.00
40 " " " Iron Ore Properties, . . . . .	.....	60.00
355 " Old Colony R. R.,	63,190.00	2,485.00
27 " N. Y. Central & Hudson River R. R., .	2,866.28	155.25
290 " Northern R. R. (N. H.),	29,290.00	1,740.00
52 " West End Street Railway, preferred, .	4,305.56	208.00
84 " Central Vermont R'y,	428.72	.....
707 " Pennsylvania R. R.,	51,856.04	2,121.00
71 " " " (50 % paid),	1,775.00	.....
19 " Boston Real Estate Trust,	25,230.25	855.00
100 " Paddock Building Trust,	10,000.00	350.00
Cash in American Trust Co.,	7,062.04	211.88
	<u>\$4,155,143.74</u>	<u>\$204,456.34</u>

SUMMARY:

Cash, Exhibit A,	\$7,062.04
Securities, Exhibit A,	2,630,045.84
Land and Buildings, Exhibit A.	1,518,035.86
	<u>\$4,155,143.74</u>
Interest and Dividends, Exhibit B,	\$123,214.32
Rents, Land and Buildings, Exhibit B,	81,242.02
	<u>\$204,456.34</u>

SCHEDULE 2

SECURITIES—GENERAL INVESTMENTS

June 30, 1911

Mortgages and Other Loans.	Principal.	Income.
Mortgages,	\$867,000.00	
Advances to Bussey Trust,	812,499.08	
Abbeville Cotton Mills Note,	50,000.00	
American Woolen Co.'s Note,	50,000.00	
Curtis and Sanger's Note,	50,000.00	
Darlington Manufacturing Co.'s Note,	50,000.00	
David Moffat Co. of Mass. Note,	100,000.00	
Indian Head Mills of Alabama Note,	50,000.00	
Merrimack Manufacturing Co.'s Note,	25,000.00	
Nashua Manufacturing Co.'s Note,	100,000.00	
Otis Elevator Co.'s Note,	100,000.00	
Pacific Mills Note,	50,000.00	
	<u>\$1,804,499.08</u>	<u>\$76,958.44</u>
Public Funds.		
£3,500 Imperial Japanese Sterling 4½'s of 1925 (sold during the year),		\$607.23
\$94,000 United States of Mexico 4's of 1954, . .	\$87,250.00	3,760.00
	<u>\$87,250.00</u>	<u>\$4,367.23</u>
Railroad Bonds.		
\$100,000 Baltimore & Ohio 1st M. 4's of 1948, . .	\$96,625.00	\$4,000.00
100,000 B. & O. (S. W. Div.) 1st M. 3½'s of 1925,	89,750.00	3,500.00
100,000 Baltimore & Ohio (Pittsburg, Lake Erie & West Virginia) Ref. M. 4's of 1941,	99,250.00	4,000.00
125,000 Bangor & Aroostook Cons. Ref. M. 4's of 1951,	118,750.00	5,000.00
57,600 Burl. & Mo. in Nebr. non-ex. 6's of 1918,	57,600.00	4,116.00
444,000 Chicago, Burl. & Quincy 3½'s of 1949, . .	455,255.29	15,248.80
150,000 " " Gen. M. 4's of 1958,	145,250.00	6,000.00
200,000 C. B. & Q. (Illinois Div.) 4's of 1949, . .	200,844.46	7,977.78
100,000 Chicago & No. Western Gen. M. 3½'s of 1987,	100,900.18	3,488.23
100,000 Chicago, Rock Island & Pacific Gen. M. 4's of 1988,	106,051.08	3,920.90
196,000 Duluth, Missabe & Northern General M. 5's of 1941,	209,847.62	9,428.81
100,000 Indiana, Ill. & Iowa 1st M. 4's of 1950,	96,500.00	4,000.00
200,000 Kansas City, Fort Scott & Memphis Cons. M. 6's of 1928,	232,827.61	10,068.97
114,000 Kansas City, Memphis & Birmingham (assented) Income 5's of 1984,	108,500.00	5,700.00
Amounts carried forward,	<u>\$2,112,951.24</u>	<u>\$86,439.49</u>

GENERAL INVESTMENTS

	Principal.	Income.
Amounts brought forward, . . .	\$2,112,951.24	\$86,439.49
Railroad Bonds (continued).		
\$100,000 Lake Shore & Michigan Southern Deb.		
4's of 1931,	93,250.00	2,133.33
100,000 Lake Shore & Michigan Southern Deb.		
4's of 1928 (sold during the year),		2,533.33
300,000 Long Island Unified M. 4's of 1949,	283,257.50	12,000.00
200,000 Louisville & Jeffersonville Bridge Co.		
1st M. 4's of 1945,	191,000.00	8,000.00
100,000 Minneapolis Union 1st M. 5's of 1922,	101,464.79	4,866.33
100,000 Montana Central 1st M. 6's of 1937,	129,656.22	4,859.37
300,000 New York Central & H. R. (L. S. & M. S. Coll.) 3½'s of 1998,	294,464.40	10,500.00
55,000 New York, New Haven & Hartford Convertible 3½'s of 1956 (sold during the year),		1,786.31
25,000 New York, New Haven & Hartford Convertible Deb. 6's of 1948,	25,000.00	1,500.00
100,000 New York, New Haven & Hartford Deb.		
4's of 1955,	105,500.00	3,875.00
200,000 New York, Ontario & Western Ref. M.		
4's of 1992,	209,385.23	7,884.13
343,000 Northern Pacific-Great Northern Joint		
4's (C. B. & Q. Coll.) of 1921,	164,325.92	13,720.00
100,000 Oregon Short Line Cons. 1st M. 5's of 1946,	114,593.77	4,583.03
100,000 Oregon Short Line Ref. M. 4's of 1929,	96,875.00	4,000.00
46,000 Pennsylvania Co. 3½'s of 1916,	43,875.00	1,715.00
250,000 Richmond-Washington Co. Coll. Trust		
4's of 1948, Series C,	255,310.60	9,834.05
100,000 St. Louis & San Francisco Ref. M. 4's of 1951,	97,125.00	4,000.00
£40,000 St. Paul, Minneapolis & Manitoba (Pacific Extension) 4's of 1940,	200,367.07	7,535.52
\$100,000 Southern Pacific 1st Ref. M. 4's of 1955,	97,062.50	4,000.00
100,000 Southern Pacific Conv. 4's of 1929	99,625.00	4,000.00
200,000 Terminal R. R. Association of St. Louis		
Gen. M. Ref. 4's of 1953,	200,000.00	8,000.00
400,000 Union Pacific 1st M. & L. G. 4's of 1947,	353,114.75	16,000.00
100,000 " " Conv. 4's of 1927,	95,392.50	4,000.00
	<u>\$5,363,596.49</u>	<u>\$227,765.39</u>
Traction Bonds.		
\$150,000 Boston & Northern Street R'y 1st M.		
Ref. 4's of 1954,	\$139,000.00	\$6,000.00
84,250 Central Crosstown Coll. Trust 5% Notes of 1909,	83,625.00	.....
200,000 Chicago Railways 1st M. 5's of 1927,	198,388.90	4,944.45
100,000 Cleveland Railway Ref. M. 5's of 1931,	100,000.00	.....
Amounts carried forward,	\$521,013.90	\$10,944.45

GENERAL INVESTMENTS

55

	Principal.	Income.
Amounts brought forward,	\$521,013.90	\$10,944.45
Traction Bonds (continued).		
\$300,000 Interborough-Metropolitan Coll. Trust 4½'s of 1956,	254,782.50	13,500.00
300,000 Interborough Rapid Transit Co. Con- vertible 6% Gold Notes of 1911 (sold during the year), . . . . .	.....	9,000.00
303,000 Interborough Rapid Transit Co. Gold M. 5's of 1952,	297,725.38	7,575.00
75,000 Kansas City Terminal R'y 1st M. Gold 4's	72,987.50	1,022.23
100,000 Metrop. Street R'y of Kansas City Consol. M. 5's of 1918,	99,000.00	888.89
100,000 Metrop. West Side Elevated 4's of 1938,	91,746.25	4,000.00
100,000 " " " Ext. M. 4's of 1938,	97,000.00	4,000.00
100,000 Northern Texas Traction Co. 1st M. 5's of 1933,	100,000.00	250.00
150,000 Old Colony Street R'y 1st M. Ref. 4's of 1954,	139,000.00	6,000.00
100,000 Second Ave. (N. Y.) Con. M. 5's of 1948,	115,789.60	.....
93,000 Third Avenue (N. Y.) 1st Consol. M. 4's of 2000,	94,052.36	.....
100,000 United Traction & Electric Co. 1st M. 5's of 1933,	109,599.97	4,563.63
	<u>\$1,992,647.46</u>	<u>\$61,744.20</u>

Sundry Bonds.

\$100,000 American Agricultural Chemical Co. 5's of 1928,	\$101,414.28	\$719.84
300,000 American Tel. & Tel. Co. 4's of 1929, .	286,000.00	8,000.00
100,000 Boston Electric Light Co. 1st Cons. M. 5's of 1924,	109,173.06	4,320.51
145,000 Broadway Realty Co. Purchase money 1st M. 5's of 1926,	152,498.02	6,766.25
200,000 Calumet & Hecla Mining Co. 5% Coupon Notes of 1919,	201,600.00	9,800.00
140,000 Chicago Edison Co. 1st M. 5's of 1926 (sold during the year), . . . . .	.....	6,709.60
250,000 Chicago Junction Railways and Union Stock Yards Coll. Trust 5's of 1915, .	250,080.55	12,479.85
100,000 Chicago Junction Railways and Union Stock Yards 4's of 1940,	98,500.00	4,000.00
150,000 Detroit Edison Co. 1st M. 5's of 1933, .	152,658.22	7,376.28
143,000 General Electric Co. Convertible Deb. 5's of 1917 (sold during the year), . .	.....	7,213.61
100,000 Madison River Power Co. 1st M. 5's of 1935,	85,000.00	5,000.00
Amounts carried forward, . . .	\$1,486,924.13	\$72,885.94

GENERAL INVESTMENTS

	Principal.	Income.
Amounts brought forward, . .	\$1,486,924.13	\$72,385.94
Sundry Bonds (continued).		
\$50,000 Massachusetts Gas Co.'s S. F. 4½'s of 1929,	48,876.00	2,250.00
100,000 Metrop. Tel. & Tel. Co. 1st M. 5's of 1918 (sold during the year), . . . . .	.....	4,180.67
100,000 Minneapolis General Electric Co. Gen. M. 5's of 1984,	101,991.56	4,915.26
100,000 Michigan State Telephone Co. 5's of 1924,	100,000.00	.....
100,000 Montreal Light, Heat and Power Co. 1st M. Coll. Trust 4½'s of 1932,	100,683.27	4,466.66
100,000 Municipal Gas & Electric Co. of Rochester, N. Y., 1st M. 4½'s of 1942,	100,000.00	4,500.00
100,000 New England Tel. & Tel. Co. 5's of 1916,	104,705.84	4,068.82
75,000 New York Tel. Co. Gen. M. Gold S. F. 4½'s,	71,568.75	3,375.00
100,000 North American Co. Coll. Trust 5% Notes of 1912 (sold during the year), . . . . .	.....	972.22
100,000 Pacific Coast Power 5's of 1940,	96,000.00	.....
100,000 Pejescot Paper Co. 1st M. 5's of 1917 and 1921,	99,000.00	5,000.00
200,000 Portland Gen'l Elec. 1st M. 5's of 1935,	202,953.86	9,876.93
100,000 Railway & Light Securities Co. Coll. Trust 5's of 1935,	100,818.20	4,965.90
100,000 Railway & Light Securities Co. Coll. Trust 5's of 1939, 2d series,	100,000.00	5,000.00
100,000 Railway & Light Securities Co. Coll. Trust 5's of 1939, 3rd series,	98,000.00	2,583.33
200,000 Southern Power Co. 1st M. Gold 5's,	197,500.00	4,763.89
188,000 St. Louis National Stock Yards Co. 1st M. 4's of 1930,	181,945.00	6,443.33
100,000 Seattle Electric Co. 5% Notes of 1911, (sold during the year), . . . . .	.....	5,000.00
100,000 Tacoma Railway & Power Co. 1st M. 5's of 1929,	100,960.00	4,980.00
50,000 United Electric Securities Co. Coll. Trust 5's of 1936, 24th series,	50,000.00	2,500.00
75,000 United Electric Securities Co. Coll. Trust 5's of 1938, 27th series,	75,000.00	3,750.00
50,000 United Electric Securities Co. Coll. Trust 5's of 1939, 29th series,	50,997.80	4,303.76
100,000 United Fruit Co. 4½'s of 1925,	96,000.00	.....
100,000 Washington Water Power Co. 5's of 1939,	100,373.34	4,986.67
100,000 Western Elec. Co. Coll. Trust Gold 4½% Notes (sold during the year), . . . . .	.....	4,250.00
200,000 Western Elec. Co. 1st M. 5's of 1922,	199,000.00	.....
100,000 Westinghouse Electric Manufacturing Co. 5's Notes of 1917,	94,625.00	97.22
	<u>\$3,907,421.75</u>	<u>\$169,505.60</u>

Railroad Stocks.

		Principal.	Income.
700 shares	Baltimore & Ohio,	\$70,862.50	\$4,200.00
507 "	Chicago, Milwaukee & St. Paul, pfd.,	50,670.58	3,549.00
1268 "	Chicago, Milwaukee & St. Paul,	177,425.94	8,876.00
2282 "	Chicago & No. Western,	319,255.55	19,967.50
1337 "	Great Northern, preferred,	294,558.56	{ 9,359.00
955 "	Great Northern Iron Ore Properties, }		
800 "	Louisville & Nashville,	93,924.00	5,600.00
8 "	Louisville Property	1.00	.....
700 "	Manhattan,	92,762.50	4,900.00
2088 "	New York Central & Hudson River,	151,173.21	12,006.00
1367 "	New York, New Haven & Hartford,	211,890.79	1,468.00
1000 "	Northern Pacific,	115,315.00	7,000.00
6229 "	Pennsylvania,	382,406.40	18,884.00
622 "	" (50% paid),	15,550.00	.....
500 "	Union Pacific,	91,487.50	5,000.00
		<u>\$2,066,733.53</u>	<u>\$102,042.00</u>

Manufacturing and Telephone Stocks.

2000 shares	American Smelters Securities Co. 5% cumulative preferred, series B,	\$196,000.00	\$10,000.00
1320 "	American Tel. & Tel. Co.,	161,610.52	10,560.00
12 "	Amoskeag Manufacturing Co.,	8,654.00	1,440.00
2430 "	General Electric Co.,	262,626.27	9,144.00
187 "	Merrimack Manufacturing Co.,	18,615.10	.....
24 "	Pacific Mills,	16,668.29	2,880.00
		<u>\$659,174.18</u>	<u>\$34,024.00</u>

Real Estate Trust Stocks.

1000 shares	Barristers Hall,	\$92,766.00	\$4,000.00
250 "	Business Real Estate,	23,750.00	.....
2500 "	Department Store,	220,291.88	11,250.00
1000 "	Essex Street,	100,000.00	4,000.00
750 "	Kimball Building,	75,000.00	2,250.00
1089 "	Paddock Building,	104,363.72	3,811.50
1000 "	Post Office Square Building,	103,000.00	4,000.00
1000 "	St. Paul Business Real Estate Assoc.	100,000.00	3,177.78
1000 "	Tremont Building,	100,000.00	2,187.50
1875 "	Western Real Estate Trust,	196,500.00	11,250.00
		<u>\$1,115,671.60</u>	<u>\$45,926.78</u>

Sundry Stocks.

611 shares	Edison Elec. Illum. Co., Boston, Mass.,	\$124,927.50	\$7,832.00
1500 "	Massachusetts Gas Companies, pref'd,	132,107.00	6,000.00
1164 "	Trimountain Trust,	108,769.00	73.35
		<u>\$365,803.50</u>	<u>\$13,405.35</u>

SUMMARY :

	Principal.	Income.
Mortgages and Notes,	\$1,804,499.08	\$76,958.44
Public Funds,	87,350.00	4,367.23
Railroad Bonds,	5,368,596.49	227,765.89
Traction Bonds,	1,992,647.46	61,744.20
Sundry Bonds,	3,907,421.75	169,505.60
Railroad Stocks,	2,066,733.53	102,042.00
Manufacturing and Tel. Stocks,	659,174.18	34,034.00
Real Estate Trust Stocks,	1,115,671.60	45,926.78
Sundry Stocks,	365,803.50	13,405.35
Total, Exhibit A,	<u>\$17,362,797.59</u>	
Total, Exhibit B,		<u>\$735,738.99</u>

SCHEDULE 3

LAND AND BUILDINGS—GENERAL INVESTMENT

June 30, 1911

Real Estate in Boston.	Principal.	Net Income.
Adams Estate, Washington Street,	\$250,000.00	\$15,785.89
Amory Estate, Franklin Street,	165,615.81	9,075.66
Cowdin Estate, Haymarket Square,	36,000.00	2,065.21
Estate, 20 and 21 Haymarket Square,	58,913.52	1,338.89
Faneuil Hall Square Estate,	197,047.80	8,328.84
Gerrish Block, Blackstone and North Streets,	192,875.75	8,214.31
Gray Estate, Washington Street,	954,529.07	72,899.16
Lowell Estate, Washington Street,	464,868.91	26,421.29
Old Boston Music Hall Estate,	356,611.00	19,330.32
Townsend Estate, Hawkins Street,	44,419.49	1,787.27
Union and Friend Streets,	81,000.00	40.15
Webb Estate, Washington Street,	164,604.79	17,329.07
Total, Exhibit A,	<u>\$2,965,986.14</u>	
Total, Exhibit B,		<u>\$182,616.06</u>

SCHEDULE 4

FUNDS AND GIFTS

June 30, 1911

[The date following the title of a Fund shows the year of its establishment.]

Principal, July 1, 1910.	UNIVERSITY FUNDS	Principal, June 30, 1911.
\$44,000.00	Anonymous (1910),	\$186,568.75
.....	Walter F. Baker (1909),	46,877.95
2,000.00	William H. Baldwin, Jr. (1906),	2,000.00
1,148.00	Band Music (1908),	1,148.00
4,950.00	Andrew Bigelow (1898),	4,950.00
5,000.00	Stanton Blake (1889),	5,000.00
4,771.88	Charlotte F. Blanchard (1891), .	4,771.88
5,250.00	Samuel D. Bradford (1866), . .	5,250.00
50,000.00	Martin Brimmer (1907),	50,000.00
100,000.00	James C. Carter (1906),	100,000.00
12,500.00	John W. Carter (1898),	12,500.00
87,518.86	Class of 1883 (1908),	94,622.77
9,612.25	Edward Erwin Coolidge (1906),	9,777.10
153.67	Thomas Cotton (1727),	154.94
83,835.06	John Cowdin (1888),	83,835.06
115,966.56	George B. Dorr (1882),	115,966.56
48,458.50	George Draper (1892),	48,458.50
56,788.00	R. H. Eddy (1901),	56,788.00
101,225.49	Harvard Ellis (1895),	101,225.49
20,918.57	Richard W. Foster (1905), . . .	20,918.57
5,822.09	John Davis Williams French (1901),	5,822.09
20,571.18	Gore (1834),	20,571.18
25,000.00	John C. Gray (1881),	25,000.00
20,000.00	Walter Hastings (1888),	20,000.00
100,000.00	Henry L. Higginson (1906), . .	100,000.00
5,000.00	George Baxter Hyde (1895), . .	5,000.00
4,000.00	Insurance and Guaranty (1860), .	4,000.00
16,871.63	Leonard Jarvis (1859),	16,871.63
10,000.00	Henry P. Kidder (1894),	10,000.00
10,000.00	Joseph Lee (1802),	10,000.00
10,000.00	Theodore Lyman (1898),	10,000.00
15,750.00	Israel Munson (1844),	15,750.00
50,000.00	Henry S. Nourse (1904),	49,980.00
113,817.44	Francis E. Parker (1886), . . .	113,817.44
4,005.59	George F. Parkman (1909), . . .	4,005.59
30,000.00	William Perkins (1888),	30,000.00
50,000.00	Henry L. Pierce (1898),	50,000.00
157,098.14	Henry L. Pierce (Residuary) (1898),	157,198.14
63,789.30	President's (1883),	64,334.47
370,081.87	Retiring Allowance (1879),	371,957.48
11,000.00	Riverside (1903),	11,000.00
\$1,796,348.08	. . . Amounts carried forward, . . .	\$1,945,616.04

Principal, July 1, 1910.		Principal, June 30, 1911.
\$1,796,848.08	.. Amounts brought forward, . .	\$1,945,616.04
23,370.08	John L. Russell (1889),	23,370.03
2,116.62	Mary R. Searle (1903),	1,852.25
46,918.18	Isaac Sweetser (1894),	46,918.18
5,000.00	Seth Turner (1883),	5,000.00
100,000.00	William F. Weld (1898),	100,000.00
		\$2,122,751.45

COLLEGE FUNDS

12,955.38	John W. P. Abbot (1874), . . .	\$12,588.70
27,748.64	Alford Professorship (1765), . . .	27,748.64
7,806.86	Daniel Austin (1879),	7,806.86
5,787.61	William H. Baldwin, Jr. 1885 (1906),	5,787.61
.....	Caroline M. Barnard Bequest (1911),	6,072.75
666.67	John Barnard (1777),	666.67
30,686.85	John B. Barringer (1873), . . .	30,686.85
15,000.00	Robert Charles Billings, for Gray Herbarium (1903),	15,000.00
1,050.00	John A. Blanchard (1873), . . .	1,050.00
39,780.00	Botanic Department (1880), . . .	39,780.00
28,337.40	Boylston Professorship (1772), . .	28,337.40
11,224.65	Francis James Child Memorial (1897),	11,224.65
7,105.12	Classical Publication Fund of the Class of 1856 (1888),	7,179.37
103,669.41	Class of 1880 (1905),	103,669.41
82,055.71	Fund of the Class of 1882 (1907),	91,924.30
265.69	Class of 1883 Special Fund (1908),	278.59
97,549.91	Class of 1884 (1909),	98,599.91
105,097.01	Class of 1885 Gift (1910),	108,305.99
.....	Class of 1886 (1911),	100,000.00
150,637.54	Class Subscription (1870),	150,637.54
322,158.89	Edward W. Codman (1905), . .	321,399.84
1,500.00	John Coggan (1852),	1,500.00
58,018.63	T. Jefferson Coolidge, for Re- search in Physics,	57,521.55
4,101.50	Paul Dudley (1751),	4,250.40
111,434.26	Eaton Professorship (1908), . . .	111,838.81
21,619.50	Eliot Professorship (1814),	21,619.50
10,000.00	Eliot " (Jonathan Phillips's gift) (1854),	10,000.00
3,500.01	Erving Professorship (1791), . . .	3,500.01
35,990.99	Fisher " (1834),	35,990.99
431.07	Henry Flynt (1760),	434.57
16,240.38	Fund for Permanent Tutors (1796), .	16,240.38
1,033.57	Fund for Religious Services (1887), .	1,033.57
\$3,287,201.06	.. Amounts carried forward, . . .	\$1,488,669.86
		\$2,122,751.45

FUNDS AND GIFTS

61

Principal, July 1, 1910.		Principal, June 30, 1911.	
\$3,287,201.06	. . Amounts brought forward, . . .	\$1,433,669.86	\$2,122,751.45
6,011.18	George A. Gardner (1893), . .	6,078.51	
15,013.68	Godkin Lectures (1908),	15,141.86	
7,627.79	Gospel Church (1868),	7,812.77	
32,711.00	Asa Gray Memorial (1898), . . .	32,711.00	
21,451.25	Asa Gray Professorship of Systematic Botany (1897),	21,451.25	
200,096.86	Gurney (1888),	200,096.86	
6,426.59	George Silsbee and Ellen Sever Hale (1904),	5,661.71	
15,289.80	Harvard Oriental Series (1899), . .	15,258.56	
20,655.91	Herbarium (1865),	20,655.91	
20,217.08	Hersey Professorship (1772), . . .	20,217.08	
21,744.18	Hersey Professorship (Thomas Lee's gift) (1856),	21,744.18	
520.00	Thomas Hollis (for Treasurer) (1721),	520.00	
34,517.60	Hollis Professorship of Divinity, .	34,517.60	
	Composed of these Funds :—		
	William Dummer (1762),		
	Daniel Henchman (1742),		
	Thomas Hollis (1721),		
	Jonathan Mason (1798),		
	James Townsend (1788).		
3,747.33	Hollis Professorship of Mathematics,	3,747.33	
	Composed of these Funds :—		
	Thomas Brattle (1713),		
	William Dummer (1762),		
	Daniel Henchman (1758),		
	Thomas Hollis (1726).		
1,000.00	Thomas Hubbard (1774),	1,000.00	
444.44	Nathaniel Hulton (1695),	444.44	
233.33	Thomas Hutchinson (1739), . . .	233.33	
6,159.78	Ingersoll Lecture (1894),	6,258.54	
61,536.43	Abbott Lawrence (1859),	61,536.43	
50,875.00	James Lawrence (1865),	50,875.00	
11,537.00	Lectures on Political Economy (1889),	11,996.55	
15,796.97	Lee Fund for Reading (1863), . . .	15,796.97	
110,043.29	Henry Lee Professorship (1900), .	110,043.29	
.....	Solomon Lincoln Bequest (1911),	10,273.73	
7,720.00	Joseph Lovering for Physical Research (1891),	7,732.50	
68,257.81	Lowell Fund for a Botanic Garden (1882) (formerly Professorship of Natural History, 1805),	68,257.81	
20,040.72	Woodbury Lowery Memorial (1910),	20,212.81	
50,000.00	Arthur T. Lyman (1904),	50,000.00	
\$4,096,375.58	. . Amounts carried forward, . . .	\$2,253,445.38	\$2,122,751.45

Principal, July 1, 1916.		Principal, June 30, 1911.
\$4,096,375.58	. . . Amounts brought forward, . . .	\$2,253,445.38 \$2,122,751.45
43,062.93	McLean Professorship (1834), . .	43,062.93
1,802.26	Music Department (1903),	1,865.41
333.33	John Newgate (1650),	333.33
26,699.44	William Belden Noble Lectures (1898),	26,788.83
.....	Trenor L. Park Bequest (1911), .	21,914.79
101,216.39	Francis Greenwood Peabody Fund (1905),	100,396.53
14,605.54	Daniel H. Peirce (1876),	14,676.38
435.48	James Mills Peirce Bequest (bal.),	456.58
21,000.00	Perkins Professorship (1841), . .	21,000.00
31,500.00	Jonathan Phillips (1861), . . .	31,500.00
75,000.00	Physical Laboratory Endowm't(1881),	75,000.00
25,020.19	Plummer Foundation (1854), . .	25,020.19
52,500.00	Pope Professorship (1868), . . .	52,500.00
189,655.98	Sarah E. Potter Endowment Fund,	189,655.98
238,732.51	Professorship of Hygiene (1899), .	238,871.83
51,934.07	" " (1902), . .	52,340.17
22,073.15	" " (1908), . .	32,555.25
195,821.18	Nelson Robinson, Jr. Additional (1906),	193,921.10
3,535.00	Ezekiel Rogers (1701),	3,535.00
117,134.99	Eliza O. and Mary P. Ropes, .	119,018.53
56,368.73	Rumford Professorship (1819), . .	56,368.73
1,514.00	Daniel Russell (1679),	1,514.00
2,000.00	John L. Russell (1889),	2,000.00
5,512.54	George William Sawin (1890),	5,779.92
5,000.00	Robert W. Sayles (1906), . . .	5,000.00
33,570.80	Shaler Memorial (1907),	33,498.99
23,139.83	Smith Professorship (1816), . . .	23,139.83
2,500.00	William M. Spackman (1905),	2,500.00
2,042,744.93	Teachers' Endowment (1905), . . .	2,050,807.18
16,303.16	John E. Thayer (1885),	15,988.30
1,227.72	Elizabeth Torrey (1896), . . .	1,287.28
13,552.42	Henry Warren Torrey (1890), .	13,807.26
112,705.44	Twenty-fifth Anniversary Fund of the Class of 1881 (1906),	113,975.44
101,358.68	Unknown Memorial (1898), . . .	101,219.47
50,000.00	Henry Villard (1902),	50,000.00
40,000.00	Wales Professorship (1903), . . .	40,000.00
17,638.95	Samuel Ward (1680),	18,494.39
6,463.95	Cyrus M. Warren (1893), . . .	6,567.88
119,213.37	Henry C. Warren (1899), . . .	119,528.34
7,740.34	Sylvester Waterhouse (1896), .	8,115.73
50,000.00	Increase Sumner Wheeler (1889),	50,000.00
83.10	Jerome Wheelock (1903), . . .	97.42
1,354.45	Chauncey Wright (1884), . . .	1,420.12
\$8,017,930.43	. . . Amounts carried forward,	\$8,341,219.94

FUNDS AND GIFTS

63

Principal, July 1, 1910.		Principal, June 30, 1911.
\$8,017,930.43	.. Amounts brought forward,	\$8,841,219.94

GIFTS FOR SPECIAL USE (BALANCES)

1,104.68	Anonymous Gift for Fellowship in Physical Research,	\$648.84	
.....	Anonymous Gift for Salary, 1911-12,	400.00	
150.00	Anonymous Gift for Special Aid, . .	270.00	
1,099.53	Bermuda Biological Station,	1,251.88	
745.57	Cases, etc., at the Botanic Garden, .	760.48	
30.27	F. P. Bonney Gift,	30.27	
8.60	Common Room in Conant Hall, . . .	8.60	
337.24	Harvard Economic Studies, . . . .	.....
.....	Department of English—Gift for Publications,	1,550.00	
.....	Gift Department Economics,	578.71	
78.08	Experimental Phonetics,	78.08	
70.04	French Department Library,	70.04	
14.50	Geographical Department, Lantern Slides,	14.50	
84.00	Department of Geology, Exhibition Case for Photographs,	54.69	
322.52	Collections for a Germanic Museum, .	322.52	
.....	Department of Government—F. G. Thomson Gift,	476.80	
36.15	Augustus Hemenway Gift,	36.15	
1,339.87	Department of History, Books, . . .	1,029.91	
94.50	Gift for Apparatus for Professor Jeffrey's Courses,	350.00	
20.00	Gift for Land in New Hampshire, . .	20.00	
10.23	Lowell Memorial Library,	10.23	
24.18	Arthur T. Lyman Gift, . . . . .	.....
122.62	Edward Mallinckrodt Gift,	47.62	
30.00	Department of Mathematics,	30.00	
200.00	International Committee on Teaching Mathematics,	100.00	
.....	Mathematics Publication Fund, . . .	490.47	
9.60	Anonymous Gift (Mineralogy Exhibits),	.....
100.00	Sir John Murray Gift,	100.00	
.....	Department Music, John Knowles Paine Memorial,	5.48	
.....	Department Music, Gift,	74.16	
61.18	Philosophical Library,	59.05	
49.79	Physical Research, . . . . .	.....
3,729.09	Plantation of Shrubs, etc.,	3,803.67	
76.88	Harvard Psychological Review, . . .	14.65	
25.00	Political Economy Department, Li- brary,	25.00	
\$8,027,894.55	.. Amounts carried forward,	\$12,711.80	\$8,841,219.94

Principal, July 1, 1910.		Principal, June 30, 1911.
\$8,027,894.55	. . Amounts brought forward, . . .	\$12,711.80 \$8,841,219.94
6,594.22	Decorating the front of the Nelson Robinson Jr. Hall,	6,089.12
2,118.90	Sanskrit Department,	2,866.98
184.20	Semitic Library,	1,002.05
1,862.47	Social Ethics,	4,818.38
.....	Social Ethics Library,	900.00
699.08	Furnishings for the Department of Social Ethics,	644.78
785.72	Sugar-cane investigation, etc., . . .	801.43
		28,679.49

FELLOWSHIP

.....	Bayard Cutting (1910),	\$25,505.20	
.....	W. Bayard Cutting, Jr. Bequest (1910),	12,920.20	
5,604.94	George W. Dillaway (1903), . .	5,876.78	
26.17	Fellowship in Central American Arch- aeology (balance),	26.17	
11,846.54	Ozias Goodwin Memorial (1889),	11,896.12	
11,262.51	Harris (1868),	11,809.77	
26,322.36	Edward William Hooper (1905),	26,448.98	
11,410.82	John Thornton Kirkland (1871),	11,463.71	
12,271.61	Henry Lee Memorial (1889), . .	12,341.80	
19,066.40	Charles Eliot Norton (1901), . .	19,166.40	
13,510.69	Robert Treat Paine (1887), . .	13,565.97	
62,129.51	John Parker (1873),	62,892.82	
10,449.37	Francis Parkman (1906), . . .	10,506.15	
10,200.00	Princeton (1910),	10,244.70	
33,454.38	Rogers (1869),	33,576.90	
12,607.03	Henry Bromfield Rogers Memo- rial (1889),	12,693.47	
500.00	Social Ethics,	524.25	
.....	South End House (balance), . . .	100.00	
12,222.31	John Tyndall (1885),	12,815.08	
11,739.06	James Walker (1881),	11,808.26	
25,156.91	Whiting (1896),	25,477.03	331,658.76

SCHOLARSHIP

3,957.78	Abbot (1852),	\$3,974.74	
2,737.37	Alford (1785),	2,870.01	
5,427.82	Bartlett (1881),	5,441.08	
5,712.75	Bassett (1876),	5,808.83	
13,855.86	Bigelow (1865),	13,927.88	
200.00	Charles Sumner Bird,	9.70	
3,418.86	Samuel A. Borden (1896), . . .	3,584.68	
116,405.05	Bowditch (1864),	116,759.02	
4,743.64	Bright (balance),	4,611.22	
\$8,486,328.23	. . Amounts carried forward, . . .	\$156,987.16	\$8,701,558.19

FUNDS AND GIFTS

65

Principal, July 1, 1910.		Principal, June 30, 1911.	
\$8,486,328.23	.. Amounts brought forward, . . .	\$156,987.16	\$8,701,558.19
4,044.28	Browne (1887),	4,065.41	
5,639.37	Morey Willard Buckminster (1898),	5,662.86	
35,678.57	Burr (1895),	35,889.00	
6,301.44	Ruluff Sterling Choate (1884),	6,332.04	
10,147.61	George Newhall Clark (1908),	10,154.79	
.....	Thomas William Clarke (1911),	5,066.45	
8,778.29	Class of 1802 (1870),	8,829.02	
3,377.24	" 1814 (1853),	3,391.02	
6,967.74	" 1815 (Kirkland) (1852),	7,005.69	
4,855.97	" 1817 (1852),	4,891.49	
3,574.52	" 1828 (1882),	3,547.91	
5,336.82	" 1835 (1853),	5,370.66	
5,430.66	" 1841 (1871),	5,469.06	
5,429.25	" 1852 (Dana) (1876), . .	5,467.56	
16,805.76	" 1856 (1885),	16,920.85	
5,061.61	" 1867 (1886),	7,811.63	
5,376.78	" 1877 (1902),	5,412.56	
6,357.72	" 1883 (1900),	6,391.08	
.....	Classical Department (Gift),	150.00	
12,838.55	Crowninshield (1877),	12,801.24	
.....	Warren H. Cudworth,	6,000.00	
6,575.47	Francis H. Cummings (1898), .	6,619.36	
5,655.79	George and Martha Derby (1881),	5,680.11	
6,469.74	Julius Dexter (1892),	6,558.53	
3,048.75	Orlando W. Doe (1893),	3,096.63	
.....	Edda Club (1911),	250.00	
5,577.68	William Samuel Eliot (1875), .	5,764.88	
31,731.40	George H. Emerson (1908), . .	32,920.85	
43,221.00	Joseph Eveleth (1896),	43,717.22	
2,566.36	Fall River (1893),	2,590.71	
6,622.53	Farrar (1873),	6,668.75	
4,998.77	George Fisher and Elizabeth Huntington Fisher (1908), . .	5,041.22	
12,050.10	Richard Augustine Gambrell (1890),	12,109.52	
8,074.13	Charles Haven Goodwin (1889),	8,115.72	
4,608.34	Greene (1863),	4,751.83	
100.00	Price Greenleaf (balance), . . .	100.00	
.....	Selwyn L. Harding Scholarship of the Class of 1886 (1911), . .	5,066.44	
1,000.00	Harvard Club of Boston,	1,048.50	
.....	" " Lawrence,	100.00	
.....	" " Rochester, N. Y.,	200.00	
50.00	" " San Francisco,	50.00	
456.12	" " Washington, D. C. (balance),	329.24	
\$8,781,136.49	.. Amounts carried forward, . . .	\$473,896.99	\$8,701,558.19

FUNDS AND GIFTS

Principal, July 1, 1910.		Principal, June 30, 1911.
\$8,781.186.49	. . Amounts brought forward, . . .	\$478,896.99 \$8,701,558.19
10,675.26	John Appleton Haven (1902), .	10,718.00
25,459.97	William Hilton (1897),	25,794.78
11,355.56	Ebenezer Rockwood Hoar (1895),	11,406.33
6,645.75	Levina Hoar, for the town of Lin- coln, Mass. (1876),	6,728.06
13,850.46	Hodges (1878),	13,874.56
6,636.59	Hollis (1722),	6,688.48
11,276.59	Henry B. Humphrey (1890), . .	11,323.52
32,409.36	Charles L. Jones (1901),	32,676.20
11,085.43	George Emerson Lowell (1886),	11,120.63
5,771.48	Markoe (1908),	5,801.37
3,720.00	Matthews (balance),	3,355.26
6,587.10	Merrick (1888),	6,631.57
8,795.79	Morey (1868),	8,847.40
6,161.18	Lady Mowson (1643),	6,199.50
2,942.86	Boston Newsboys' (1906),	3,085.60
5,993.46	Howard Gardner Nichols (1897),	6,034.12
6,380.18	Lucy Osgood (1873),	6,363.13
.....	George Herbert Palmer (1911),	1,308.96
5,524.90	George Foster Peabody (1902),	5,460.06
4,396.15	James Mills Peirce Scholarship (1908),	4,609.36
7,768.12	Pennoyer (1670),	8,144.87
30,000.00	Charles Elliott Perkins Scholar- ships (1909),	30,000.00
4,896.07	Rebecca A. Perkins (1869), . .	4,933.53
11,286.36	Philadelphia (1904),	11,133.73
1,798.58	Wendell Phillips Mem'l (1895),	1,810.83
4,067.38	William Reed (1907),	4,070.63
850.00	Ricardo Prize (balance),	850.00
1,537.58	Rodger (1883),	1,612.17
3,646.63	Henry Bromfield Rogers (1859),	3,673.51
11,112.16	Nathaniel Ropes, Jr., Scholarship (1909),	11,176.09
15,496.81	James Augustus Rumrill (1909),	15,573.41
6,059.94	Edward Russell (1877),	6,103.85
6,005.97	Sales (1893),	6,047.26
11,844.36	Saltonstall (1739),	11,893.79
9,032.31	Leverett Saltonstall (1895), . .	9,070.36
7,243.27	Mary Saltonstall (1730),	7,294.56
3,282.13	Sever (1868),	3,291.31
11,783.56	Sewall (1696),	11,855.08
50,993.78	Shattuck (1854),	51,366.99
6,311.23	Slade (1877),	6,342.31
4,700.00	Dunlap Smith (1903),	4,700.00
4,754.70	Story (1864),	4,785.32
\$9,180,665.45	. . Amounts carried forward, . . .	\$877,147.50 \$8,701,558.19

FUNDS AND GIFTS

67

Principal, July 1, 1910.		Principal, June 30, 1911.
\$9,180,665.45	. . Amounts brought forward, . . .	\$877,147.50 \$8,701,558.19
3,552.12	Stoughton (1701),	3,598.56
4,468.31	Swift (1899),	4,685.01
84,150.32	Thayer (1857),	85,231.59
4,560.39	Gorham Thomas (1865),	4,571.85
8,104.50	Toppan (1868),	8,147.59
27,090.08	Townsend (1861),	27,403.94
.....	Ira D. Van Dusee (1911), . . .	4,919.10
5,352.16	Walcott (1855),	5,411.73
11,225.20	Christopher M. Weld (1899), .	11,269.61
5,705.03	Jacob Wendell (1899),	5,732.55
12,435.05	Whiting (1874),	12,488.15
5,000.00	Josiah Dwight Whitney (1904),	5,000.00
11,838.15	Mary L. Whitney (1903), . . .	11,912.29
10,582.34	Willard (1907),	10,620.57
2,076.40	Augustus Woodbury Scholar- ship (1909),	2,177.09
10,500.91	Charles Wyman (1905),	10,560.21 1,090,872.34

BENEFICIARY AND LOAN

54,349.09	Rebecca C. Ames (1903), . . .	\$54,515.02
.....	Anonymous Gift for certain members of the Class of 1915,	650.00
735.10	Nathaniel Appleton (1772), . .	770.75
2,261.85	Frank Bolles Memorial (1894), .	2,271.56
1,826.88	William Brattle (1717),	1,915.49
90,098.19	Daniel A. Buckley (1905), . . .	95,274.52
51,724.33	Walter Channing Cabot (1905),	51,732.94
1,295.32	Thomas Danforth (1724), . . .	1,358.68
5,473.64	Moses Day (1880),	5,473.64
522.89	John Ellery (1738),	548.26
1,353.69	Exhibitions (1796),	1,353.69
1,920.00	Fines Loan (balance),	1,074.91
951.73	Thomas Fitch (1737),	997.90
565.26	Ephraim Flynt (1723),	592.66
203.52	Henry Flynt (1760),	213.41
4,741.27	Freshman Loan (balance),	3,166.15
1,018.18	Freshman Loan, Gove Gift, . . .	1,038.54
588.40	Henry Gibbs (1722),	616.92
4,030.27	John Glover (1653),	4,225.72
14,324.65	Price Greenleaf Aid (balance), .	16,635.29
254.10	Student Fund of the Harvard Engi- neering Society of New York (1908) (balance),	751.90
11,838.89	Edwin A. W. Harlow (1905), .	11,904.74
5,615.26	Robert Henry Harlow (1908),	5,615.26
438.70	Edward Holyoke (1743),	459.99
2,823.93	Robert Keayne (1659),	2,960.89
\$9,646,262.05	. . Amounts carried forward, . . .	\$266,118.83 \$9,792,430.53

FUNDS AND GIFTS

Principal, July 1, 1910.		Principal, June 30, 1911.	
\$9,646,362.05	.. Amounts brought forward, . . .	\$266,118.83	\$9,792,480.53
26,000.00	Bertram Kimball (1903), . . .	26,261.00	
2,272.42	Harry Milton Levy Loan (Col- lege) (balance),	1,877.61	
1,220.16	Mary Lindall (1812),	1,279.33	
5,988.87	Susan B. Lyman (1899),	5,988.87	
552.05	Susan B. Lyman Loans (College) (balance),	545.70	
285.00	Anne Mills (1725),	298.82	
.....	John F. Moors' Gift, Special aid for a member of the Class of 1915,	50.00	
10,962.91	Munroe (1880),	10,858.92	
2,286.48	Palfrey Exhibition (1821),	2,184.88	
5,467.96	Dr. Andrew P. Peabody Memo- rial (1896),	5,492.16	
5,192.29	Scholarship and Beneficiary Money Returned (balance),	1,844.89	
271.48	Joseph Sewall (1765),	284.62	
16,871.65	Alexander Wheelock Thayer (1899),	16,685.69	
11,171.94	Quincy Tufts (1877),	11,171.94	
366.50	Benjamin Wadsworth (1737), . . .	384.30	
7,160.00	Stuart Wadsworth Wheeler (1898),	7,739.69	359,067.25
PRIZE			
50.00	Jeremy Belknap, . . . . .	.....
1,938.10	James Gordon Bennett (1893), . .	\$2,026.85	
417.15	Philo Sherman Bennett (1905), . .	437.37	
10,400.00	Francis Boott (1904),	10,500.00	
32,226.39	Bowdoin Prizes for Dissertations (1791),	32,298.55	
2,794.76	Boylston Prizes for Elocution (1817),	2,675.07	
5,840.49	Coolidge Debating (1899),	5,853.61	
50.00	Dante Prize (balance),	50.00	
2,714.02	Lloyd McKim Garrison Prize and Medal (1904),	2,736.93	
8.24	Harvard Club of New Jersey Prizes (balance),	8.24	
2,254.50	Edward Hopkins Gift for "De- turs" (1718) (balance),	2,308.65	
1,092.82	George Arthur Knight (1909), . . .	1,145.83	
50.00	Patria Society Gift, . . . . .	.....
1,178.31	Sales (1892),	1,185.20	
2,821.91	John O. Sargent (1889),	2,758.78	
7,250.00	George B. Sohler (1890),	7,000.00	
4,253.06	Charles Sumner (1874),	4,359.33	
3,940.81	Robert N. Toppan (1894),	4,131.95	
2,436.42	Philip Washburn (1899),	2,404.57	
\$9,823,488.69	.. Amounts carried forward, . . .	\$81,880.93	\$10,151,497.78

FUNDS AND GIFTS

69

Principal, July 1, 1910.		Principal, June 30, 1911.
\$9,823,488.69	.. Amounts brought forward, . .	\$81,880.93\$10,151,497.78
116,435.61	David A. Wells (1901),	116,832.76
.....	Elizabeth Wilder (1911), . . .	2,026.04
.....	Wister (1911),	816.59
		201,056.82

SUMMER SCHOOL

10,581.80	Sayles, for Summer Course in Geology (1909),	\$10,850.00	10,850.00
-----------	---	-------------	-----------

LIBRARY

57.71	Boott Income for Books (balance),	\$56.35
2,104.56	Bowditch (1861),	2,127.19
58.67	Bright (balance),	818.08
1,029.67	William R. Castle (1907), . . .	1,085.84
847.01	Fund of the Class of 1851 (1899),	888.09
834.10	" " " 1851 (C. F. Dunbar's Gift) (1899),	874.55
3,598.18	Book Fund of the Class of 1881 (1906),	3,588.42
27,896.40	Edwin Conant (1892),	27,901.38
25,892.26	Constantius (1886),	25,892.26
.....	Archibald C. Coolidge and Clarence L. Hay (1910), . . .	4,708.89
.....	W. Bayard Cutting, Jr. Bequest (1910),	12,509.20
.....	Bayard Cutting Fellowship, In- come for Books (balance),	17.70
5,287.48	Denny (1875),	5,337.50
5,593.63	Farrar (1871),	5,572.24
.....	Charles Gross Memorial (1910), .	1,590.07
3,379.17	Haven (1844),	3,180.72
10,009.26	Hayes (1885),	10,055.98
5,375.93	Hayward (1864),	5,349.69
1,259.35	R. M. Hodges (balance),	770.90
2,348.45	Hollis (1774),	2,384.62
2,172.65	Homer (1871),	2,140.84
514.15	Jarvis (1885),	503.21
5,261.88	Lane (1863),	5,329.17
.....	George C. Lodge and Joseph Trumbull Stickney Memorial Book Fund (1911),	3,125.55
28,394.55	Lowell (1881),	28,750.98
.....	Francis Cabot Lowell (1911), .	10,000.00
60,028.47	Minot (1870),	60,000.00
8,954.92	Charles Eliot Norton (1905), .	9,065.91
7,104.13	Lucy Osgood (1873),	7,213.67
\$10,158,458.68	.. Amounts carried forward, . . .	\$240,338.45\$10,362,904.10

FUNDS AND GIFTS

Principal, July 1, 1910.		Principal, June 30, 1911.
\$10,158.45	Amounts brought forward, . . .	\$240,333.45
6,973.69	Mary Osgood (1860),	7,030.88
5,982.32	Francis Parkman Memorial (1908),	5,950.91
25,224.79	George F. Parkman (for books) (1909),	25,162.57
3,916.67	Sales (1892),	3,921.40
5,418.87	Salisbury (1858),	5,489.30
5,120.00	Stephen Salisbury (1907), . . .	5,120.00
20,534.96	Sever (1878),	20,382.61
3,949.87	Shapleigh (1801),	3,949.87
29.79	George B. Schier Income for Books (balance),	126.03
2,512.71	Strobel Memorial, Class of 1877 (1909),	2,878.11
1,942.59	Strobel Memorial, Siam (1909), .	1,993.46
10,501.24	Subscription for Library (1859), .	10,513.49
37,345.58	Sumner (1875),	37,438.88
5,159.35	Kenneth Matheson Taylor (1899),	5,075.64
11,925.34	Daniel Treadwell (1885), . . .	11,925.34
.....	John Harvey Treat Book Fund (1911),	41,521.99
5,176.47	Ichabod Tucker (1875),	5,208.34
.....	20th Mass. Regiment of Volunteer Infantry (1910),	615.08
245.68	Wales Income for Books (balance),	142.43
15,958.52	Walker (1875),	15,903.44
5,250.41	Ward (1858),	5,250.41
2,288.90	Julian Palmer Welsh Memorial (1910),	3,002.41
20,000.00	J. Huntington Wolcott (1891), .	20,020.38
100,000.00	Eben Wright (1883),	100,000.00
7,297.17	Sundry Gifts for books (balances), .	4,141.37
.33	Sundry Gifts for services (balance), .	.33
.....	Gift for cases,	2,000.00
56.06	Duplicate Money,	58.68
887.78	Fines,	137.06
19.95	Gifts for Additional Service, . . .	218.52
		585,512.38

DIVINITY SCHOOL

71,427.02	New Endowment (1879),	\$71,427.02
17,000.00	Oliver Ames (1880),	17,000.00
525.00	Hannah C. Andrews (1836), . .	525.00
1,115.26	Daniel Austin (1880),	1,115.26
1,000.00	Adams Ayer (1869),	1,000.00
15,275.00	Joseph Baker (1876),	15,275.00
\$10,568,520.00	Amounts carried forward, . . .	\$106,342.28
		\$10,948,416.48

Principal, July 1, 1910.		Principal, June 30, 1911.
\$10,568,530.00	. . Amounts brought forward, . . .	\$106,842.28
240.82	Beneficiary money returned (balance),	252.51
4,296.17	Bushton Dashwood Burr (1894),	4,849.69
37,583.74	Bussey Professorship (1862), . .	37,583.74
2,177.95	Joshua Clapp (1836),	2,177.95
5,000.00	Edwin Conant (1892),	3,794.32
25,544.37	Dexter Lectureship (1810), . . .	25,544.37
56,203.14	Frothingham Professorship (1892),	56,708.14
1,050.00	Abraham W. Fuller (1847), . .	1,050.00
911.34	Lewis Gould (1852),	911.34
966.54	Louisa J. Hall (1893),	979.15
6,008.43	Hancock Professorship ,	6,008.43
	Composed of these Funds:—	
	Thomas Hancock (1765),	
	Stephen Sewall (1762).	
143,100.81	Charles L. Hancock (1891), . .	151,742.21
5,000.00	Haven (1898),	5,000.00
1,050.00	Samuel Hoar (1857),	1,050.00
10,000.00	Henry P. Kidder (1881), . . .	10,000.00
9,184.69	Henry Lienow (1841),	9,184.69
1,050.00	Caroline Merriam (1867), . . .	1,050.00
16,015.81	Parkman Professorship (1814), .	16,015.81
682.94	John W. Quinby (1888),	716.07
1,000.00	Abby Crocker Richmond (1881),	1,000.00
1,000.00	John L. Russell (1890),	1,000.00
.....	Horace S. Sears Gift Lectures, .	1,200.00
10,000.00	William B. Spooner (1890), . .	10,000.00
40,000.00	Thomas Tileston of New York	
	Endowment (1879),	40,000.00
5,250.00	Mary P. Townsend (1861), . .	5,250.00
2,100.00	Winthrop Ward (1862),	2,100.00
58,845.73	Winn Professorship (1877), . . .	58,845.73
1,038.20	Augustus Woodbury Bequest	
	(1909),	1,038.20
		560,889.68

SCHOLARSHIP AND BENEFICIARY

2,651.04	Robert Charles Billings Prize	
	(1904),	\$2,679.61
13,597.50	Abner W. Buttrick (1880), . . .	13,682.00
5,846.84	Thomas Cary (1820),	5,880.42
2,934.95	George Chapman (1834), . . .	2,952.30
4,696.18	Joshua Clapp (1839)	4,723.94
15,469.81	Jackson Foundation (1835), . . .	15,580.11
5,910.87	J. Henry Kendall (1863), . . .	5,947.55
3,638.44	Nancy Kendall (1846),	3,662.88
1,050.00	William Pomroy (1835),	1,058.92
		56,167.78
\$11,069,116.31	. . Amounts carried forward,	\$11,565,473.84

<u>Principal, July 1, 1910.</u>	<u>Principal, June 30, 1911.</u>
\$11,089,116.81	Amounts brought forward, \$11,565,473.84

LAW SCHOOL

10,090.92	Ames (1910),	\$10,580.38	
657.70	James Barr Ames Loan (1904),	1,410.02	
4,410.48	James Barr Ames Prize (1898),	4,224.37	
98,979.27	Bemis Professorship (1879),	98,537.35	
2,173.00	Gift of James Munson Barnard and Augusta Barnard (balance),	2,216.46	
23,979.82	Bussey Professorship (1862),	23,979.82	
111,257.99	James C. Carter Professorship (1906),	110,654.00	
13,052.95	James Coolidge Carter Loan (1906),	13,772.41	
15,750.00	Dane Professorship (1829),	15,750.00	
5,821.26	Samuel Phillips Prescott Fay, 1798, Fund and Scholarship (1907),	5,174.55	
3,814.51	George Fisher Scholarship (1906),	3,849.54	
.90	Hughes Loan (1903),	266.51	
26,167.84	Langdell (1909),	26,286.99	
47,021.25	Law School Book (1882),	47,021.25	
100,000.00	Law School Library (1898),	100,000.00	
2,804.58	Harry Milton Levy Loan (Law) (balance),	411.71	
8,840.81	Royall Professorship (1781),	8,340.81	
1,641.61	Scholarship money returned (balance),	1,574.69	
1,500.00	Joshua Montgomery Sears, Jr., Memorial Gift,	1,590.11	
94,994.97	Weld Professorship (1882),	94,994.97	
.....	Gift for Research Scholarship,	250.00	570,885.79

GRADUATE SCHOOL OF APPLIED SCIENCE

20,921.44	Julia Amory Appleton Fellow- ship (1906),	\$20,936.11	
1,253.24	Edward Austin Loans repaid (bal.),	1,193.24	
4,197.49	Priscilla Clark Hodges Scholar- ship (1907),	4,226.04	
11,819.79	Hennen Jennings Scholarship (1898),	11,868.06	
4,591.74	Lawrence Scientific School Loans repaid (balance),	7,276.10	
100.00	Henry Weidemann Locke Schol- arship. Gift (balance),	200.00	
615.00	Susan B. Lyman Loan (L. S. S.) (balance),	738.82	
1,002,808.64	Gordon McKay Endowment (1909),	1,887,910.25	
\$12,682,682.51	Amounts carried forward,	\$1,434,348.62	\$12,186,359.63

FUNDS AND GIFTS

73

<u>Principal,</u> <u>July 1, 1910.</u>		<u>Principal, June 30, 1911.</u>	
\$12,682,683.51	.. Amounts brought forward, . .	\$1,484,845.62	\$12,186,859.63
250.00	Edward Dyer Peters Scholarship (balance),	250.00	
40,805.73	Professorship of Engineering (1847),	40,805.73	
545,000.00	Nelson Robinson, Jr. (1899), .	550,000.00	
25,000.00	Arthur Rotch (1895),	25,000.00	
60,000.00	Gurdon Saltonstall (1901), . .	60,000.00	
11,791.87	Josiah Stickney (1899),	11,791.87	
.....	Ames-Butler Gift,	2,787.81	
6,633.73	Gift for Equipment, Department of Architecture,	5,856.34	
15.00	Gift Dept. of Forestry, Marsh house, . . . . .	.....
.13	Gift for electrical apparatus, . . . . .	.....
13.97	Gift for Laboratory of Metallurgical Chemistry,	13.97	
2,301.01	Nelson Robinson, Jr. Special Expense Gift,	2,276.07	
.....	Nelson Robinson, Jr. Special Gift for Salaries,	18,112.69	
1,330.57	Summer course Mining Camp Gift, .	809.61	
.....	Mining and Metallurgy Scholarship (gift),	349.92	2,147,852.13

GRADUATE SCHOOL OF BUSINESS ADMINISTRATION

650.00	Gifts for Loans (balance),	\$380.00	
200.00	Gifts for Prizes (balances), . . . . .	.....
.....	Gift of Warren D. Robbins—South American Course,	100.00	
.....	Gift of Joseph E. Sterrett, Books on Accounting,	84.10	564.10

MUSEUM OF COMPARATIVE ZOOLOGY

.....	Alexander Agassiz Bequest (1910),	\$99,500.00	
.....	Alexander Agassiz Bequest for Publications (1910),	94,794.56	
297,933.10	Agassiz Memorial (1875),	297,933.10	
5,908.60	Virginia Barret Gibbs Scholarship (1892),	5,945.19	
50,000.00	Gray Fund for Zoological Museum (1859),	50,000.00	
108,511.23	Sturgis Hooper (1865),	107,391.03	
7,740.66	Humboldt (1869),	7,740.66	
5,000.00	Willard Peele Hunnewell (1901),	5,000.00	
117,469.34	Permanent (1859),	117,469.34	
7,594.01	Teachers' and Pupils' (1875), . . .	7,594.01	
5,526.10	Maria Whitney (1907),	5,880.57	799,198.46
\$13,982,253.56	.. Amounts carried forward,	\$15,083,474.32	

Principal, July 1, 1910.		Principal, June 30, 1911.
\$18,982,258.56	.. Amounts brought forward,	\$15,083,474.32

GERMANIC MUSEUM

10,013.52	Germanic Museum (1909),	\$10,013.52	
102,980.78	Germanic Museum Building (1908), . .	209,268.49	
51,220.23	Germanic Museum Endowment (1909),	58,704.55	
26,835.00	Emperor William (1906),	26,835.00	
.....	Gift for work of art,	1,000.00	300,321.56

PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY
AND ETHNOLOGY

12,642.79	Hemenway Fellowship (1891), . .	\$13,255.97	
.....	Mary Hemenway Fund for Archaeology (1910),	46,515.83	
28,355.56	Peabody Building (1866),	28,355.56	
47,335.10	Peabody Collection (1866),	47,335.10	
47,335.10	Peabody Professor (1866),	47,335.10	
30,352.47	Thaw Fellowship (1890),	30,165.91	
10,000.00	Henry C. Warren Exploration (1899),	10,010.00	
5,000.00	Susan Cornelia Warren (1902),	5,000.00	
6,064.93	Robert C. Winthrop Scholar- ship (1895),	6,359.08	
20,000.00	Huntington Frothingham Wol- cott (1891),	20,000.00	254,332.55

MEDICAL SCHOOL

5,650.16	Harvard Medical Alumni (1907),	\$5,924.23	
1,250.00	Harvard Medical Alumni Gifts (balance), . . . . .	.....
10,363.78	Anonymous Fund in the Department of Theory and Practice (1906), . .	10,363.78	
11,303.10	Edward Austin (Bacteriological Laboratory) (1899),	11,699.40	
30,271.54	Edward M. Barringer (1881),	30,271.54	
100,000.00	Robert C. Billings (1900),	100,000.00	
6,593.70	J. Ingersoll Bowditch (1889),	6,044.84	
1,678.20	Boylston Fund for Medical Books (1800),	1,674.85	
24,826.83	John B. & Buckminster Brown Endowment (1896),	25,530.94	
76,115.99	Bullard Professorship of Neuro- pathology (1906),	76,251.06	
.....	Memorial Cancer Hospital Endow- ment (1910),	102,195.86	
.....	Memorial Cancer Hospital Main- tenance (1910),	11,293.67	
\$14,647,942.34	.. Amounts carried forward,	\$381,250.17	\$15,638,128.43

FUNDS AND GIFTS

75

Principal, July 1, 1910.		Principal, June 30, 1911.
\$14,647,942.84	.. Amounts brought forward, ..	\$381,250.17 \$15,638,128.43
95,788.65	Caroline Brewer Croft (1899),	92,846.07
13,650.53	Dr. John C. Cutter Bequest (1910),	15,228.34
386,265.36	Calvin and Lucy Ellis (1899),	387,141.80
215,694.64	George Fabyan Foundation for Comparative Pathology (1906), .	207,940.88
.....	George Fabyan Foundation Spe- cial (1910),	9,824.83
52,552.79	Charles F. Farrington (1909),	52,601.61
1,836.08	Samuel E. Fitz (1884),	1,836.08
.....	Rebecca A. Greene (1911), . .	25,000.00
4,915.66	F. B. Greenough (Surgical Re- search) (1901),	6,202.59
105,868.85	George Higginson Professorship (1902),	106,479.25
52,239.80	John Homans Memorial (1906),	52,239.80
69,192.65	Jackson Professorship of Clinical Medicine (1859),	69,192.65
102,997.46	Henry Jackson Endowment (1903),	102,738.57
178,608.27	Hamilton Kuhn Memorial (1908),	179,060.17
51,634.85	Walter Augustus Lecompte Professorship of Otology (1907),	52,120.38
1,572.16	Harriet Newell Lowell (1907),	2,699.77
2,324.28	Medical Library (1872),	2,326.60
53,052.28	William O. Moseley (1897), . .	53,125.30
38,850.00	New Subscription (1888),	38,850.00
10,020.18	Lyman Nichols (1907),	10,020.18
8,581.40	George F. Parkman (Medical) (1910),	8,581.40
6,046.95	Gift for Pathological Laboratory, .	6,132.45
500.00	Repayment Pathological Laboratory,	1,852.68
38,779.88	Henry L. Pierce (Residuary) (1898),	39,216.62
54,315.02	Proctor (1908),	52,895.72
1,000,000.00	John D. Rockefeller Gift (1902),	1,000,000.00
9,335.94	Dr. Rupperer (1897),	9,335.94
6,419.27	School of Comparative Medicine (1899),	6,730.59
35,322.04	Henry Francis Sears Fund for Pathology (1907),	35,041.37
77,000.00	George C. Shattuck (1853), . .	77,000.00
10,857.39	James Skillen Memorial Fund (1907),	10,857.39
117,180.93	James Stillman Professorship (1902),	117,564.21
6,779.01	Surgical Laboratory (1897),	5,763.83
\$17,455,619.66	.. Amounts carried forward, . . .	\$3,219,697.19 \$15,638,128.43

FUNDS AND GIFTS

Principal, July 1, 1910.		Principal, June 30, 1911.
\$17,455,619.66	.. Amounts brought forward, . .	\$3,219,697.19 \$15,638,138.43
15,765.11	Mary W. Swett (1884),	15,765.11
20,000.00	Samuel W. Swett (1884),	20,000.00
2,000.00	Quincy Tufts (1879),	2,000.00
10,784.18	Warren Fund for Anatomical Museum (1848),	11,254.78
51,762.32	Edward Wigglesworth Professorship of Dermatology (1907),	52,292.78
41,600.00	Charles Wilder (1900),	41,940.00
47,054.42	Henry Willard Williams (1898),	48,836.54
182.49	Gifts for Anatomical Research (bal.),	270.41
2,580.01	Gift for Pathological Dep't. (bal.),	3,007.41
121.20	Aesculapian Club Gift,	121.20
3.21	Anonymous Gift for Theory and Practice,	3.21
84.61	W. H. Walker Gift,	84.61
138.61	Gift, Bacteriological Laboratory, .	46.86
250.00	Mary B. Bremer Gift for Department of Anatomy,	4.87
247.68	William N. and Katherine E. Bullard Gift,	322.90
.....	Gift for a Salary, Cancer Commission,	200.00
210.00	Gift for Diabetes Mellitus,	210.00
.....	Sale of Duplicate Books, Library, .	2.90
50.00	Experiments on Animals,	43.80
.....	Gift, Investigation Infantile Paralysis,	3,730.96
308.08	Loan Fund Medical Class of 1879, .	328.03
727.91	Mass. Society for Promoting Agriculture, Department of Comparative Pathology,	1,688.43
13.98	G. K. Sabine Gift,	13.98
5.37	Sears Pathological Laboratory Publication Fund,	5.37
132.53	Gifts for Department Neuropathology,	114.22
16.05	Department of Physiology,	16.05
.....	Gift for Recreation Grounds, . . .	950.00
.24	Anonymous Gift for Investigation of Smallpox, . . . . .	.24
1,914.21	Gift for X-ray Apparatus,	1,058.48 3,424,010.28

FELLOWSHIP

8.32	Anonymous Gift for Teaching Fellowships in Histology and Embryology (balance),	\$8.32
13,259.82	Charles Follen Folsom Memorial (1908),	12,984.18
\$17,664,784.91	.. Amounts carried forward, . . .	\$12,992.50 \$19,062,138.71

FUNDS AND GIFTS

77

Principal, July 1, 1910.		Principal, June 30, 1911.
\$17,664,784.91	. . Amounts brought forward, . .	\$12,992.50 \$19,062,188.71
5,582.96	George Cheyne Shattuck Memorial (1891),	5,628.74
5,998.38	Charles Eliot Ware Memorial (1891),	6,089.28
5,523.51	John Ware Memorial (1891), . .	5,656.42
17,000.00	Henry P. Walcott (1910), . .	25,310.99
		55,627.98

SCHOLARSHIP

150.00	Aesculapian Club Scholarship, . . .	.....
5,430.18	Lucius F. Billings (1900), . .	\$5,468.53
6,319.43	James Jackson Cabot (1906),	6,350.90
5,950.08	David Williams Cheever (1889),	5,988.61
3,331.19	Cotting Gift (1900),	3,367.74
3,053.73	Orlando W. Doe (1893), . . .	3,101.85
.....	John Foster income for Medical Students (balance),	3.60
5,848.05	Lewis and Harriet Hayden (1894),	5,906.68
.....	William Otis Johnson (1911),	2,026.29
6,900.92	Claudius M. Jones (1893), . .	6,890.77
.....	John R. Kissinger (1911), . .	3,018.33
5,721.18	Alfred Hosmer Linder (1895),	5,748.65
9,072.66	Joseph Pearson Oliver (1904),	9,112.70
5,937.13	Charles B. Porter (1897), . . .	5,975.07
5,366.54	Francis Skinner (1905),	5,476.84
5,375.52	Charles Pratt Strong (1894), .	5,411.36
6,838.39	Isaac Sweetser (1892),	6,920.03
5,603.11	John Thomson Taylor (1899),	5,624.86
5,747.49	Edward Wigglesworth (1897),	5,776.22
		92,158.93

PRIZE

4,555.23	Boylston (1803),	\$4,762.55
9,425.65	William H. Thorndike (1895),	9,682.81
		14,445.36

DENTAL SCHOOL

8,765.85	Dental School Endowment (1880), .	\$12,000.85
10.00	Dental School Endowment of the Class of 1909 (1910),	20.00
25.00	Dental School Research Fund, . .	125.00
5,713.33	Harvard Dental Alumni Endow- ment (1906),	6,195.33
.....	Harriet Newell Lowell Gift,	1,000.00
23,000.00	Henry C. Warren Endowment (1889),	23,000.00
500.00	Proctor Bequest (1910),	500.00
24.16	Gift for Surgical Instruments, . .	15.16
10,325.00	Joseph Warren Smith, Jr. Memorial (1909),	10,325.00
40.27	Gifts for X-ray Apparatus, . . .	40.27
		53,221.61
\$17,847,719.80	. . Amounts carried forward,	\$19,277,592.54

Principal, July 1, 1910.		Principal, June 30, 1911.
\$17,847,719.80	.. Amounts brought forward,	\$19,277,592.54

OBSERVATORY

22,050.54	Advancement of Astronomical Science (1901),	\$20,109.98	
20,000.00	Advancement of Astronomical Science (1902),	20,523.50	
5,000.00	Thomas G. Appleton (1884), .	5,000.00	
825.87	Bond Gifts (balance),	825.87	
2,500.00	J. Ingersoll Bowditch (1889), .	2,500.00	
200,000.00	Uriah A. Boyden (1887), . . .	200,000.00	
62.84	Draper Memorial (balance), . .	62.84	
2,000.00	Charlotte Harris (1877), . . .	2,000.00	
45,000.00	Haven (1898),	45,000.00	
21,000.00	James Hayward (1866), . . .	21,000.00	
50,000.00	Observatory Endowment (1882), .	50,000.00	
50,000.00	Paine Professorship (1886), . . .	50,000.00	
273,932.07	Robert Treat Paine (1886), . .	273,932.07	
110,293.88	Edward B. Phillips (1849), . .	110,293.88	
17,170.97	Josiah Quincy (1866),	12,995.12	
44,048.16	David Sears (1845),	45,116.33	
13,880.00	Augustus Story (1871),	13,880.00	
.....	J. Rayner Edmonds Bequest (1911),	1,014.21	
42.35	Gift for publishing lunar photographs,	42.35	873,795.65

BUSSEY INSTITUTION

20,658.86	Woodland Hill (1895),	\$20,658.86	20,658.86
-----------	---------------------------------	-------------	-----------

ARNOLD ARBORETUM

129,230.00	Arnold Arboretum (1899),	\$125,340.00	
162,385.42	James Arnold (1872),	162,779.20	
33,329.08	Arboretum Construction Gifts (balance),	42,309.99	
12,500.00	Robert Charles Billings (1904), .	12,500.00	
20,000.00	William L. Bradley (1897), . .	20,000.00	
2,308.06	Bussey Fund for the Arnold Arboretum (1903),	2,308.06	
.....	Massachusetts Society for Promoting Agriculture (1911),	4,500.00	
20,000.00	Francis Skinner (1906),	20,000.00	
4,247.92	Sears Gift for Library,	3,132.12	
1,389.23	Gift for Expedition to China (balance),	2,250.68	395,120.05

PHILLIPS BROOKS HOUSE

10,506.66	Phillips Brooks House Endowment (1901),	\$10,506.66	
11,843.64	Ralph H. Shepard (1900), . . .	11,843.64	
\$19,152,924.85	.. Amounts carried forward,	\$21,850.30	\$20,567,167.10

FUNDS AND GIFTS

79

Principal, July 1, 1910.		Principal, June 30, 1911.
\$19,152,924.85	. . . Amounts brought forward, . . .	\$21,850.80 \$20,567,167.10
5,705.77	Ralph Hamilton Shepard Memorial (1898),	5,490.50
6,758.78	John W. and Belinda L. Randall (1897),	7,086.59
		84,417.39

WILLIAM HAYES FOGG ART MUSEUM

50,000.00	William Hayes Fogg (1892), .	\$50,000.00	
16,087.93	Gray Fund for Engravings (1858),	16,000.28	
14,911.69	William M. Prichard (1898), .	15,016.47	
30,338.83	John Witt Randall (1892), . . .	30,000.00	111,016.75

STILLMAN INFIRMARY

7,727.78	Stillman Infirmary Gift (balance),	\$8,102.58	
60,555.57	Robert Charles Billings, for Stillman Infirmary (1903), . .	60,555.57	
6,376.79	Free Bed Fund of the Class of 1868 (1898),	6,376.79	
653.26	Free Bed Fund for Stillman Infirmary (1900),	653.26	
3,633.38	Herbert Schurz Memorial Free Bed (1903),	3,633.38	
3,204.16	Henry P. Walcott (1901), . . .	3,204.16	82,525.74

CLASS FUNDS

1,755.78	Fund of the Class of 1834 (1887),	\$1,833.70	
110.89	" " " 1842 (1908),	116.27	
10,184.51	" " " 1844 (1896),	10,838.70	
13,684.42	" " " 1846 (1905),	14,848.09	
3,720.35	" " " 1853 (1887),	3,725.00	
7,800.00	" " " 1856 (1904),	7,863.75	38,725.51

GIFTS FOR CONSTRUCTION

10,526.84	Arnold Arboretum Building Gifts,	\$10,943.85	
421.74	Brighton Marsh Fence (balance), . .	421.74	
.....	Francis H. Burr Memorial, . . .	25,749.91	
.....	Freshman Dormitories,	32,587.89	
94,220.23	Walcott Gibbs Memorial (1909),	105,852.40	
537.99	Gift for Gray Herbarium — Kidder Wing,	386.02	
.....	Gray Herbarium Library,	10,074.80	
.....	Collis P. Huntington Memorial Hospital,	7,975.35	
442.43	Semitic Building (balance),	442.43	
316,269.83	Amey Richmond Sheldon (1909),	331,608.93	
\$19,818,553.30	. . . Amounts carried forward, . . .	\$526,043.32 \$20,833,852.49	

FUNDS AND GIFTS

Principal, July 1, 1910.		Principal, June 30, 1911.
\$19,818.58	Amounts brought forward, . . .	\$526,043.32
37.97	John Simpkins Hall (balance), . . .	
354,594.66	George Smith Bequest (1904), . .	380,821.01
11,977.39	Gift for a new University Library Building (balance),	12,558.27
		919,422.60

SUNDRY

476,265.50	Edward Austin (1899),	\$476,463.28
50,000.00	Bright Legacy (1880),	50,000.00
392,710.18	Bussey Trust (1861),	392,710.18
165,859.27	Calvin and Lucy Ellis Aid (1899),	166,217.72
3,171.50	John Foster (1840),	3,171.50
794,942.67	Price Greenleaf (1887),	794,942.67
29,939.33	Henry Harris (1883),	29,939.33
1,745.88	Harvard Memorial Society (1898),	1,830.56
62,434.95	Robert Troup Paine (1880), . .	64,421.50
42,000.00	James Savage (1873),	42,000.00
361,460.93	Frederick Sheldon (1909), . . .	366,425.97
150,000.00	Edward Wigglesworth Memo- rial (1909),	150,000.00
5,158.15	Gifts for Semitic Museum Collection (balance),	6,084.95
24,815.09	Gifts for Excavations in Palestine (balance),	4,268.70
.....	Gifts for Chinese Students (balance),	107.00
33.96	Gifts for Cuban Teachers (balance),	33.96
		2,548,617.32

FUNDS IN TRUST FOR PURPOSES NOT
CONNECTED WITH THE COLLEGE

16,396.02	Daniel Williams (1716),	\$16,506.47
4,757.79	Sarah Winslow (1790),	4,795.66
		21,302.13
<u>\$22,766,854.54</u>		<u>\$24,323,194.54</u>

SCHEDULE 5

GENERAL SUSPENSE

CREDIT BALANCES

July 1, 1910	June 30, 1911	June 30, 1911
\$4,129.68	Cryptogamic Herbarium,	\$4,777.20
550.66	Department of Forestry, . . . . .	.....
6,779.81	Gray Herbarium,	5,778.41
3,185.47	Jefferson Physical Laboratory, . . . . .	.....
751.37	School for Social Workers,	1,708.52
9,026.04	Graduate School of Business Administration,	12,337.44
.....	Graduate School of Applied Science.	
	Unexpended balances,	\$8,854.52
	Reserve,	2,045.60
16,094.50	Divinity School,	17,413.45
56,724.60	Law School,	66,151.52
18,488.52	Museum of Comparative Zoölogy,	18,826.43
.....	Peabody Museum of American Archaeology and Ethnology,	2,457.56
564.64	Germanic Museum,	1,282.06
12,395.77	Bussey Institution,	5,338.46
16.18	Fogg Art Museum, . . . . .	.....
65.92	Botanical Museum,	1,681.63
2,246.16	Botanic Garden,	3,366.96
.....	Laboratory Fees, Astronomy,	292.51
.....	“ “ Botany (Fernald),	110.00
.....	“ “ “ (Thaxter),	105.03
.....	“ “ Chemistry,	251.23
.....	“ “ Geology,	157.70
.....	“ “ Hygiene,	819.96
.....	“ “ Mining and Metallurgy,	53.98
.....	Engineering Camp, Squam Lake,	571.61
.....	Baker Estate,	277.08
<u>\$130,969.32</u>	Total — Exhibit A,	<u>\$154,158.81</u>

SCHEDULE 6

GENERAL SUSPENSE

DEBIT BALANCES

July 1, 1910	June 30, 1911	June 30, 1911
Advances from General Investments to :		
..... Adams Estate,		\$8,345.02
\$2,393.00 Aid to Chinese Students,
3,662.50 Aids, general,		4,787.50
1,828.95 Annals of Mathematics,
250.00 Anonymous Fund,		54.48
..... Anonymous Gift for Harvard Clinic,		746.02
..... Anonymous Gift for Research in Government,		325.00
..... Baker Estate,		8.82
14,625.90 Uriah A. Boyden Fund,		15,188.47
..... Business School, Gift for Prizes,		100.00
32,785.51 Bussey Trust (Real Estate),		39,238.23
.08 Carnegie Foundation Retiring Allowances,
108.94 Francis James Child Memorial Fund,		23.55
1,774.21 Classical Department,		1,574.21
374.25 Classical Library Fund,		436.65
384.59 Classical Publication Fund of the Class of 1856,
540.00 Warren H. Cudworth Scholarship,		889.55
225.00 Warren Delano Scholarship,		225.00
1,672.87 Dental School,		11,014.61
95,521.07 Dental School Building,		99,066.91
1,855.75 Dining Hall Committee,		1,855.75
150.00 Frank W. Draper Fund,
688.19 Estate No. 52 India St.,		813.67
829.31 " 21 Wharf St.,		829.68
..... Fogg Art Museum,		244.54
..... Department of Forestry,		1,584.66
2.00 Freight on Books,
.19 John Foster income for Medical Students,
..... Harvard Club of Buffalo Scholarship,		200.00
120.00 " " " Chicago Scholarship,
..... " " " Cleveland Scholarship,		400.00
..... " " " Fitchburg Scholarship,		8.50
..... Harvard Economic Studies,		980.02
830.56 Sturgis Hooper Fund,
..... Jefferson Physical Laboratory,		44.03
80.72 Joseph Lovering Fund for Physical Research,
18,588.30 Medical School,		27,742.09
..... Menorah Society Prize,		200.00
1,050.42 Mining and Metallurgy,		1,050.42
57.58 Division of Music Gifts,
\$180,394.64 . . Amounts carried forward,		\$217,977.33

July 1, 1910		June 30, 1911
\$180,394.64	Amounts brought forward,	\$217,977.38
850.00	New University Library Building,	850.00
4,500.00	Old Boston Music Hall Estate,	51,998.26
974.27	Peabody Museum of American Archaeology and Ethnology, . . . . .	.....
272.76	Charles Elliott Perkins Scholarship Fund,	17.76
95.94	Radcliffe College,	95.94
26,702.27	Randall Hall Association,	26,702.27
.....	John Wirt Randall Fund,	29.81
7.04	Robert W. Sayles Fund, . . . . .	.....
.....	Sayles, for Summer Course in Geology,	1.25
.....	Mary R. Searle Fund,	49.16
.....	Shaw Fund, Business Research,	150.00
15,256.93	Improvements and Additions to The Soldier's Field, . .	10,875.94
94.74	Dunlap Smith Scholarship Fund,	94.74
880.91	Stillman Infirmary,	722.41
.....	Townsend Estate,	8,161.25
75.12	Henry C. Warren Exploration Fund, . . . . .	.....
1,900.00	Webb Estate,	26,847.45
.....	George Wigglesworth Gift,	182.09
150.16	Huntington Frothingham Wolcott Fund,	810.16
5,518.84	Woodland Hill Fund,	5,902.90
.....	Laboratory Fees — Mineralogy,	10.61
	Library Funds:	
28.62	Bowditch, . . . . .	.....
13.55	Constantius,	92.75
80.15	Price Greenleaf,	3.82
55.85	Lane, . . . . .	.....
272.91	Lowell, . . . . .	.....
389.78	Minot,	67.39
139.24	Charles Eliot Norton, . . . . .	.....
329.11	Henry L. Pierce, . . . . .	.....
40.50	Sales, . . . . .	.....
20.78	Shapleigh,	8.62
24.26	Strobel Memorial (Siam), . . . . .	.....
68.14	Subscription for Library, . . . . .	.....
279.24	Sumner, . . . . .	.....
43.46	Daniel Treadwell,	24.80
9.21	Ward,	69.84
115.30	J. Huntington Wolcott, . . . . .	.....
\$238,583.22	Total — Exhibit A,	\$350,746.55

UNIVERSITY

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of the following Funds:

Walter F. Baker,	\$996.38
Band Music,	55.44
John Barnard,	32.35
Andrew Bigelow,	240.08
Stanton Blake,	242.50
Charlotte F. Blanchard,	231.39
Samuel D. Bradford,	254.63
James C. Carter,	4,850.00
John W. Carter,	554.39
Class of 1883,	4,030.69
John Coggan,	72.75
Edward Erwin Coolidge (part),	164.85
Thomas Cotton,	7.47
John Cowdin,	1,641.00
George B. Dorr,	5,143.35
George Draper,	2,149.23
R. H. Eddy,	2,518.60
Harvard Ellis,	4,909.41
Richard W. Foster,	1,014.57
John Davis Williams French,	236.04
Gore,	997.69
John C. Gray,	1,108.80
Henry Harris ($\frac{1}{2}$ income),	726.02
Walter Hastings,	1,510.05
Henry L. Higginson,	4,566.15
Thomas Hollis,	25.22
Thomas Hubbard,	48.50
Nathaniel Hulton,	21.53
Thomas Hutchinson,	11.30
George Baxter Hyde,	242.50
Professorship of Hygiene (1899) (part),	1,000.00
Professorship of Hygiene (1902) (part),	200.00
Leonard Jarvis,	818.29
Henry P. Kidder,	485.00
Joseph Lee,	443.52
Theodore Lyman,	485.00
Israel Munson,	763.88
Henry S. Nourse (part),	1,528.66
Francis E. Parker,	5,048.03
George F. Parkman,	194.29
William Perkins,	1,455.00

Amount carried forward, \$51,024.55

UNIVERSITY (CONTINUED)

INCOME

Amount brought forward,	\$51,024.55	
President's,	8,098.77	
Ezekiel Rogers,	171.45	
Daniel Russell,	78.43	
John L. Russell,	1,133.45	
Amey Richmond Sheldon,	15,839.10	
Isaac Sweetser,	2,275.28	
Seth Turner,	242.50	
William F. Weld,	4,435.20	\$77,788.73
Care of the Sarah Winslow Fund,	\$5.77	
Use of houses by College officers,	1,600.00	
Use of land by Harvard Union,	7,015.50	
Sale of University Directory,	9,866.58	
Sale of Annual Catalogue,	531.60	
Sale of Quinquennial Catalogue,	855.41	
Sale of Scrap Iron, etc.,	25.97	
Sale of wood,	52.50	
Share of the cost of Taxation Pamphlet received from other Colleges,	304.27	19,757.60
		<u>\$97,546.33</u>

EXPENDITURE

Board of Overseers :

Salaries and wages,	\$320.00	
Printing Reports of President and Treasurer, . . .	2,090.36	
Printing,	528.15	
Stationery, postage, telephone and telegraph, . .	39.33	
Auditing Treasurer's accounts,	150.00	
Advertising,	88.78	
Sundries, . . . . .	.90	\$3,112.52

Corporation's Office :

Fuel, rent, etc.,	\$2,603.08	
Less 80 % transferred to the Treasurer's Office, .	2,082.46	520.62

President's Office :

Salaries :

President,	\$6,000.00	
Secretary to the President,	1,000.00	
Secretary to the Corporation,	1,000.00	
Keeper of the Corporation Records,	1,020.00	
Services and wages,	2,030.84	
Equipment and supplies,	89.65	
Stationery, postage, telephone and telegraph, . .	885.53	
Printing,	121.58	
Sundries,	34.17	
	<u>\$12,181.77</u>	

Less 90 % transferred to departments in proportion to the number of students,

	10,963.60	
	<u>\$1,218.17</u>	
Amounts carried forward,	\$1,218.17	\$3,833.14

UNIVERSITY (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$1,218.17	\$3,633.14
Additional salary of President:		
From President's Fund,	2,548.60	
From Thomas Cotton Fund,	<u>6.30</u>	3,772.97
Treasurer's Office:		
Salaries:		
Treasurer,	\$6,000.00	
Other salaries,	3,866.67	
Services and wages,	2,437.80	
Office supplies and expenses,	818.98	
Sundries,	897.07	
University charge:		
Corporation's Office,	<u>2,082.46</u>	
Less transferred:	\$15,602.48	
To University General Expense for the keeping of the Corporation's Records,	\$750.00	
To Departments in proportion to the income of their Funds,	13,884.18	14,634.18
The balance represents proportion on income of University Funds,		<u>968.30</u>
Bursar's Office:		
Salaries:		
Bursar,	\$4,500.00	
Assistant Comptroller,	2,500.00	
Assistant Bursar,	2,083.36	
Services and wages,	9,792.59	
Office supplies and expenses,	2,847.85	
Sundries,	<u>1,050.04</u>	
Less transferred:	\$22,773.84	
To the College for letting College rooms,	\$800.00	
To Departments in proportion to the Bursar's collections and payments,	21,420.47	22,220.47
The balance represents proportion applicable to University collections and payments,		<u>553.37</u>
Publication Office:		
Salary:		
Publication Agent,	\$2,500.00	
Services and wages,	1,686.36	
Office supplies and expenses,	6,978.94	
Sundries,	<u>87.26</u>	
	\$11,252.56	
Less charged directly to Departments,	<u>8,291.18</u>	
Balance transferred to Departments in proportion to the free distribution of their publications,	\$2,961.38	
Amount carried forward,		<u>\$8,927.78</u>

UNIVERSITY (CONTINUED)

EXPENDITURE

Amount brought forward,		\$8,927.78
Inspector of Grounds and Buildings :		
Salaries :		
Inspector of Grounds and Buildings,	\$4,000.00	
Services and wages,	2,994.06	
Office supplies and expenses,	410.47	
Less transferred to Departments in proportion to the floor area of buildings in the Inspector's charge,	\$7,404.53	
	<u>7,404.53</u>	
Janitor's Office :		
Services and wages,	\$2,700.00	
Office supplies and expenses,	64.90	
	<u>\$2,764.90</u>	
Less transferred to Departments in proportion to the floor area of buildings under Janitor's supervision,	2,764.90	
Quinquennial Catalogue :		
Services and wages,	\$1,606.00	
Office expenses and printing,	4,520.20	
	<u>\$6,126.20</u>	
Less sales,	855.41	
Amount to be apportioned to departments,	\$5,270.79	
Less transferred to departments in proportion to space occupied,	3,057.05	
Amount paid by University :		
General Funds, 42%,	\$2,213.74	
Amount paid by proceeds from sales,	855.41	3,069.15
Annual Catalogue :		
Printing and supplies,	\$4,723.22	
Less sales,	531.60	
Amount to be apportioned to departments,	\$4,191.62	
Less transferred to departments in proportion to space occupied,	3,520.96	
Amount paid by University :		
General Funds, 16%,	\$670.66	
Amount paid by proceeds from sales,	531.60	1,202.26
General Expenses :		
University Gazette,	\$1,462.97	
Less sales,	212.53	\$1,250.44
Commencement Day,	1,804.20	
Professional services,	1,500.00	
Expenses of Professor at Berlin,	1,200.00	
Amounts carried forward,	\$5,754.64	\$13,199.19

UNIVERSITY (CONTINUED)

EXPENDITURE

Amounts brought forward,		\$5,754.64	\$13,199.19
General Expenses (continued) :			
Keeping of the Corporation's Records, Treasurer's			
Office,	750.00		
Expenses real estate in Lucas Street,	165.06		
Entertainment of National Education Association,	705.06		
Descriptive pamphlet,	1,592.21		
University Guide Book,	\$181.98		
Less sales,	34.20	147.78	
Special guide book, Grounds and Buildings,	850.62		
Legal Services,	150.00		
Sundries,	395.96	10,511.33	
Alumni List and Directory :			
Services and wages,	\$2,314.90		
Office supplies and expenses,	1,087.74		
Printing,	7,781.46		
	\$11,184.10		
Less transferred to College,	1,767.52		
Amount paid from proceeds of sales,		9,366.58	
Engineer, Services and Expenses,	\$1,871.25		
Less transferred to Departments in proportion to the floor area of buildings under Engineer's Super- vision,	1,871.25		
Labor in maintenance of grounds,	\$10,282.51		
Less transferred to Cambridge Departments,	8,226.01	2,056.50	
Watchmen :			
In Yard,	\$2,030.95		
Outside Yard,	1,156.62		
	\$3,187.57		
Transferred to Departments in proportion to floor area of buildings,	3,187.57		
Medical Adviser's Office :			
Salary Medical Adviser :			
From Professorship of Hygiene (1899)			
Fund,	\$1,000.00		
From Professorship of Hygiene (1902)			
Fund,	200.00		
From General Funds,	2,800.00	\$4,000.00	
Services and wages,	544.62		
Office supplies and expenses,	102.34		
Sundries,	373.25		
	\$5,020.21		
Amounts carried forward,		\$5,020.21	\$35,133.60

UNIVERSITY (CONTINUED)

EXPENDITURE

Amounts brought forward,		\$5,020.31	\$85,183.60
General Expenses (continued):			
Less amount paid from General Funds, transferred: \$750 to the Stillman Infirmary and the remainder to Cambridge Departments in proportion to the number of students,			
		3,820.21	1,200.00
Memorial Hall and Sanders Theatre:			
Repairs and equipment,		\$1,265.71	
Caretaking,		669.86	
		<u>\$1,935.07</u>	
Less 90% transferred to College,		1,741.57	193.50
Repairs and equipment, general,			934.36
Taxes, Harvard Union,			5,125.50
Secretary for Employment Office:			
Salary of Secretary,		\$1,200.00	
Services and wages,		2,983.27	
Office supplies and expenses,		1,080.11	
Transferred to College,		<u>\$5,263.38</u>	
Payments made from University income for the following accounts:			
Museum of Comparative Zoölogy	Sch. 23	\$730.17	
Peabody Museum of American Archaeology and Ethnology	Sch. 24	2,064.82	
Semitic Museum	Sch. 25	966.91	
Germanic Museum	Sch. 26	142.89	
William Hayes Fogg Art Museum	Sch. 27	292.24	
Appleton Chapel	Sch. 28	110.53	
Phillips Brooks House	Sch. 29	183.66	4,491.22
			<u>\$47,078.18</u>
General Surplus, made up as follows:			
Restricted Income unused, added to Funds and Gifts,		\$16,050.89	
Surplus, carried to Schedule 10,		34,417.76	50,468.15
			<u><u>\$97,546.38</u></u>

UNIVERSITY (CONTINUED)

EXPENDITURE

Amounts brought forward,		\$5,754.64	\$13,199.19
General Expenses (continued) :			
Keeping of the Corporation's Records, Treasurer's			
Office,	750.00		
Expenses real estate in Lucas Street,	165.06		
Entertainment of National Education Association,	705.06		
Descriptive pamphlet,	1,592.21		
University Guide Book,	\$181.98		
Less sales,	34.20	147.78	
Special guide book, Grounds and Buildings,	850.62		
Legal Services,	150.00		
Sundries,	395.96	10,511.33	
Alumni List and Directory :			
Services and wages,	\$2,314.90		
Office supplies and expenses,	1,087.74		
Printing,	7,781.46		
	\$11,184.10		
Less transferred to College,	1,767.52		
Amount paid from proceeds of sales,		9,366.58	
Engineer, Services and Expenses,	\$1,871.25		
Less transferred to Departments in proportion to the floor area of buildings under Engineer's Super- vision,	1,871.25		
Labor in maintenance of grounds,	\$10,282.51		
Less transferred to Cambridge Departments,	8,226.01	2,056.50	
Watchmen :			
In Yard,	\$3,030.95		
Outside Yard,	1,156.62		
	\$3,187.57		
Transferred to Departments in proportion to floor area of buildings,	3,187.57		
Medical Adviser's Office :			
Salary Medical Adviser :			
From Professorship of Hygiene (1899)			
Fund,	\$1,000.00		
From Professorship of Hygiene (1902)			
Fund,	200.00		
From General Funds,	2,800.00	\$4,000.00	
Services and wages,	544.62		
Office supplies and expenses,	102.84		
Sundries,	373.25		
	\$5,020.21		
Amounts carried forward,		\$5,020.21	\$35,133.60

UNIVERSITY (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$5,020.21	\$85,183.60
General Expenses (<i>continued</i>):		
Less amount paid from General Funds, transferred: \$750 to the Stillman Infirmary and the remainder to Cambridge Departments in proportion to the number of students,	3,820.21	1,300.00
Memorial Hall and Sanders Theatre:		
Repairs and equipment,	\$1,265.71	
Caretaking,	669.36	
	<u>\$1,935.07</u>	
Less 90 % transferred to College,	1,741.57	198.50
Repairs and equipment, general,		984.36
Taxes, Harvard Union,		5,125.50
Secretary for Employment Office:		
Salary of Secretary,	\$1,200.00	
Services and wages,	2,983.27	
Office supplies and expenses,	1,080.11	
Transferred to College,	<u>\$5,263.38</u>	
Payments made from University income for the following accounts:		
Museum of Comparative Zoölogy Sch. 23	\$780.17	
Peabody Museum of American Archaeology and Ethnology Sch. 24	2,064.82	
Semitic Museum Sch. 25	966.91	
Germanic Museum Sch. 26	142.89	
William Hayes Fogg Art Museum . Sch. 27	292.24	
Appleton Chapel Sch. 28	110.53	
Phillips Brooks House Sch. 29	183.66	4,491.22
		<u>\$47,078.18</u>
General Surplus, made up as follows:		
Restricted Income unused, added to Funds and Gifts, \$16,050.39		
Surplus, carried to Schedule 10,	34,417.76	50,468.15
		<u><u>\$97,546.33</u></u>

COLLEGE

(Including the Graduate School of Arts and Sciences)

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of Funds for Instruction and Gifts for Salaries.

Alford Professorship,	\$1,345.83
Edward Austin (part).	
Austin Teaching Fellowships,	12,633.90
John B. Barringer,	1,488.32
Boylston Professorship,	1,374.34
Martin Brimmer,	2,425.00
Class of 1880,	5,027.95
Class Subscription,	7,305.94
Eaton Professorship,	5,404.55
Eliot Professorship,	1,048.52
Eliot " (Jon. Phillips' Gift),	350.00
Calvin and Lucy Ellis Aid (part),	4,794.02
Erving Professorship,	169.75
Fisher "	1,745.56
Henry Flynt (part),	16.55
Fund for Permanent Tutors,	787.64
Gospel Church ($\frac{1}{2}$ income used),	369.96
Gurney (part),	9,204.70
Charles L. Hancock,	4,400.00
Hersey Professorship ($\frac{1}{2}$ income),	588.31
Hersey Professorship (Thomas Lee's gift),	1,054.58
Hollis " (Mathematics),	181.73
Abbott Lawrence,	2,984.50
James Lawrence (part),	1,221.60
Henry Lee Professorship,	5,337.09
Thomas Lee, for Reading,	766.16
Arthur T. Lyman,	2,425.00
McLean Professorship,	2,088.56
Francis Greenwood Peabody (part),	3,000.00
Daniel H. Peirce,	708.39
Perkins Professorship,	1,018.50
Plummer Foundation,	1,213.47
Pope Professorship,	2,546.25
Nelson Robinson Jr. Additional (part),	1,000.00
Eliza O. and Mary P. Ropes,	5,883.54
Rumford Professorship,	2,733.90
Smith Professorship,	1,122.29
Teachers' Endowment:	
Interest,	\$98,070.83
Gift,	400.00
	98,470.83
Amount carried forward,	\$194,237.23

COLLEGE (CONTINUED)

INCOME

Amount brought forward, \$194,287.23

Income of Funds for Instruction and Gifts for Salaries

(continued).

Unknown Memorial (part),	8,115.91	
Henry Villard,	2,217.60	
Henry W. Wales:		
Wales Professorship,	1,500.00	
Henry C. Warren (part),	4,000.00	
Sylvester Waterhouse,	875.39	
David A. Wells (part),	5,000.00	
Jerome Wheelock,	4.82	
Gifts for salaries,	6,300.00	\$216,750.45

Income of Funds for General Purposes.

John W. P. Abbot (accumulating),	\$628.82	
William H. Baldwin, Jr.	97.00	
John A. Blanchard,	50.98	
Twenty-fifth Anniversary Fund of the		
Class of 1881,	5,502.83	
Fund of the Class of 1882,	4,045.43	
Class of 1884,	4,731.18	
Class of 1885,	5,097.20	
Edward W. Codman,	15,616.58	
Charles L. Hancock,	8,017.03	
Trenor L. Park,	468.80	
Jonathan Phillips,	1,537.75	
William M. Spackman,	121.25	
Gifts for General Purposes,	2,650.01	48,563.81

Income of Fellowship Funds and Gifts for Fellowships.

Edward Austin (part):

Edward Austin Fellowships,	\$2,000.00	
Cercle Français de l'Université Harvard (gift),	600.00	
Bayard Cutting,	505.20	
Bayard Cutting (for Research in Physics), .	420.20	
George W. Dillaway,	271.84	
Ozias Goodwin Memorial,	574.58	
Harris,	546.26	
Edward William Hooper,	1,276.62	
John Thornton Kirkland,	558.39	
Henry Lee Memorial,	595.19	
Woodbury Lowery Memorial,	972.09	
MacDowell (gift),	600.00	
Charles Eliot Norton,	900.00	
Robert Treat Paine,	655.28	
John Parker,	3,018.31	
Francis Parkman,	506.78	

Amounts carried forward, \$18,990.74 \$260,814.26

COLLEGE (CONTINUED)

INCOME

Amounts brought forward,	\$13,990.74	\$260,314.26
Income of Fellowship Funds and Gifts for Fellowships		
<i>(continued).</i>		
Princeton Fellowship,	44.70	
Rogers,	1,622.52	
Henry Bromfield Rogers Memorial, . . .	611.44	
Frederick Sheldon (part),	15,221.56	
South End House (gift),	400.00	
South End House in Social Education (gift), . .	300.00	
Fellowship Department of Social Ethics,	24.25	
John Tyndall,	592.77	
James Walker,	569.20	
Whiting,	1,230.12	
Adams Woods (gift),	400.00	34,997.30
Income of Scholarship Funds and Gifts for Scholarships.		
Abbot,	\$191.96	
Alford (accumulating),	132.74	
Edward Austin (part):		
" " Scholarships for Teachers, .	3,465.00	
Bartlett,	263.26	
Bassett,	276.08	
Bigelow,	672.02	
Charles Sumner Bird,	9.70	
Borden (accumulating),	165.82	
Bowditch,	5,645.64	
W. G. Bowdoin (gift),	250.00	
Bright Scholarships (part):		
Interest on balance,	\$230.08	
Bright Legacy (part income), . .	962.50	1,192.58
Browne,	196.13	
Morey Willard Buckminster,	273.49	
Burr,	1,730.43	
Ruluff Sterling Choate,	305.60	
George Newhall Clark,	507.18	
Thomas William Clarke,	66.45	
Class of 1802,	425.73	
" 1814,	163.78	
" 1815 (Kirkland),	337.95	
" 1817,	235.52	
" 1828,	173.39	
" 1835,	258.84	
" 1841,	263.40	
" 1852 (Dana),	263.31	
" 1856,	815.09	
" 1867,	250.02	
Amounts carried forward,	\$18,531.11	\$295,311.56

COLLEGE (CONTINUED)

INCOME

Amounts brought forward, \$18,531.11 \$295,311.56

Income of Scholarship Funds and Gifts for Scholarships

(continued).

Class of 1877,	260.78
“ 1883,	308.36
Classical Department (gift),	150.00
Crowninshield,	622.69
Warren H. Cudworth,	250.45
George and Martha Derby,	274.32
Julius Dexter,	318.79
Orlando W. Doe,	147.88
William Samuel Eliot,	270.53
George H. Emerson,	1,538.95
Joseph Eveleth (part),	896.22
Fall River,	124.45
Farrar,	321.22
George Fisher and Elizabeth Huntington Fisher,	242.45
Richard Augustine Gambrill,	584.42
Charles Haven Goodwin,	391.59
Benjamin D. Greene,	223.49
Mary Forbes Greene (gift),	300.00
Price Greenleaf (part):	
Price Greenleaf Scholarships,	3,000.00
Selwyn L. Harding,	66.44
Harvard Club of Boston (gift), . . \$1,000.00	
Interest, 48.50	1,048.50
“ “ Chicago (gift),	420.00
“ “ Connecticut Valley (gift), . .	200.00
“ “ Fitchburg (gift),	150.00
“ “ Hawaii (gift),	200.00
“ “ Hingham “	100.00
“ “ Indiana “	200.00
“ “ Lawrence “	100.00
“ “ Lowell “	300.00
“ “ Lynn “	100.00
“ “ Milwaukee “	300.00
“ “ Nebraska “	150.00
“ “ New Jersey “	250.00
“ “ Western Pennsylvania (gift),	300.00
“ “ Rochester, New York “	200.00
“ “ San Francisco (gift),	500.00
“ “ Washington (gift), \$101.00	
Interest, 22.12	123.12

Amounts carried forward, \$33,360.76 \$295,311.56

COLLEGE (CONTINUED)

INCOME

Amounts brought forward, \$33,360.76 \$295,311.56

Income of Scholarship Funds and Gifts for Scholarships
(continued).

Harvard Club of Worcester (gift),	200.00
John Appleton Haven,	517.74
William Hilton (part),	559.81
Ebenezer Rockwood Hoar,	550.77
Levina Hoar, for the town of Lincoln,	322.33
R. M. Hodges (part):	
Hodges Scholarship,	299.10
Hollis,	321.89
Huidekoper (gift),	200.00
Henry B. Humphrey,	546.93
Charles L. Jones,	1,571.84
George Emerson Lowell,	535.20
Markoe,	279.89
Matthews Scholarships:	
Interest on balance,	\$180.42
Matthews Hall, $\frac{1}{4}$ net rents,	8,954.84
William Merrick,	319.47
Morey,	426.61
Lady Mowlson,	298.32
Boston Newsboys',	142.74
Howard Gardner Nichols,	290.66
Lucy Osgood,	307.00
George Herbert Palmer,	7.52
George Foster Peabody,	185.16
James Mills Peirce,	213.21
Pennoyer,	376.75
Charles Eliot Perkins,	1,455.00
Rebecca A. Perkins,	237.46
Philadelphia	547.37
Wendell Phillips Memorial,	87.25
Philosophy (gift),	300.00
William Reed,	178.25
Ricardo Prize (gift),	350.00
Rodger,	74.59
Henry Bromfield Rogers,	176.88
Nathaniel Ropes Jr.,	538.93
James A. Rumrill,	526.60
Edward Russell,	293.91
Sales,	291.29
Saltonstall,	574.43
Leverett Saltonstall,	438.05
Mary Saltonstall,	351.29

Amounts carried forward, \$52,890.26 \$295,311.56

COLLEGE (CONTINUED)

INCOME

Amounts brought forward, . . . \$52,890.26 \$295,311.56

Income of Scholarship Funds and Gifts for Scholarships
(continued).

James Savage (part):

Savage Scholarship,	300.00
Sever,	159.18
Sewall,	571.52
Shattuck,	2,473.21
Slade,	306.08
Dunlap Smith,	200.00
Story,	230.62
Stoughton:	

Interest,	\$22.21	
Use of pasture,	169.23	191.44

Swift,	216.70
Thayer,	4,081.27
Gorham Thomas,	211.46
Toppan,	393.09
Townsend,	1,813.86
Ira D. Van Dusee	13.68
Walcott,	259.57
Christopher M. Weld,	544.41

Jacob Wendell:

Interest,	\$277.52	
Gift,	50.00	327.52

Whiting,	603.10
Josiah Dwight Whitney,	242.50
Mary L. Whitney,	574.14
Willard,	513.23
Augustus Woodbury,	100.69
Charles Wyman,	509.30

66,726.83

Income of Beneficiary and Loan Funds and Repayments.**Rebecca C. Ames:**

Interest,	\$2,635.93
Anonymous gifts for benefit of certain members of the Class of 1915,	650.00
Anonymous gift for special aid for a member of the Graduate School of Arts and Sciences, . .	150.00
Nathaniel Appleton,	35.65

Edward Austin:

Interest,	\$100.00
Loans repaid by students,	63.88
Frank Bolles Memorial,	109.71
William Brattle,	88.61

Amounts carried forward, \$3,833.78 \$362,038.39

COLLEGE (CONTINUED)

INCOME

Amounts brought forward, . . .	\$3,833.78	\$362,038.39
Income of Beneficiary and Loan Funds and Repayments		
<i>(continued).</i>		
Daniel A. Buckley (part),	8,116.33	
Walter Channing Cabot,	2,508.61	
Chinese Students' Aid (gift),	2,500.00	
Edward Erwin Coolidge (part),	564.83	
Thomas Danforth,	62.86	
Moses Day,	265.49	
Calvin and Lucy Ellis Aid (part),	2,375.00	
John Ellery,	25.37	
Exhibitions,	65.87	
Fines Loan Fund:		
For late registration,	\$320.00	
For delayed payment of dues,	486.25	
Loans returned,	20.25	
Interest,	93.12	919.62
Thomas Fitch,	46.17	
Ephraim Flynt,	27.40	
Henry Flynt,	9.89	
Freshman Loan: Gift,	\$25.00	
Interest,	80.03	
Loans repaid,	75.00	180.03
Freshman Loan (Gove Gift),	20.86	
Henry Gibbs,	28.52	
John Glover,	195.45	
Price Greenleaf (part),	\$16,944.55	
Price Greenleaf Aid:		
Interest,	694.76	
Price Greenleaf Aids returned,	50.87	17,689.98
Edwin A. W. Harlow:		
Interest,	\$574.19	
Loans repaid,	50.00	624.19
Robert Henry Harlow,	272.33	
Harvard Engineering Society Loan Fund:		
Gift,	\$500.00	
Loans repaid,	72.80	572.80
Edward Holyoke,	21.29	
Robert Keayne,	136.96	
Bertram Kimball,	1,261.00	
Harry Milton Levy Loan,	110.19	
Mary Lindall,	59.17	
The Loan,	6,125.00	
Susan B. Lyman:		
Interest,	193.65	
Amounts carried forward,	\$48,811.94	\$362,038.39

COLLEGE (CONTINUED)

INCOME

Amounts brought forward,	\$48,811.94	\$362,088.89
Income of Beneficiary and Loan Funds and Repayments		
<i>(continued).</i>		
Anne Mills,	18.82	
John F. Moors Gift, special aid for a member of the Class of 1915,	50.00	
Munroe:		
Interest,	\$531.71	
Loans repaid,	40.80	572.01
Palfrey Exhibition,	108.45	
Dr. Andrew P. Peabody Memorial:		
Interest,	\$265.20	
Loans repaid,	10.00	275.20
Scholarship and Beneficiary Money Returned:		
Loans repaid,	\$1,420.69	
Interest,	141.91	1,562.60
Joseph Sewall,	18.14	
Alexander W. Thayer (part),	314.04	
Quincy Tufts,	541.84	
Benjamin Wadsworth,	17.80	
Stuart Wadsworth Wheeler:		
Interest,	\$347.26	
Loans repaid,	232.43	579.69
		52,860.53
Income of Prize Funds, and Gifts for Prizes:		
Jeremy Belknap (gift),	\$50.00	
James Gordon Bennett,	98.75	
Philo Sherman Bennett,	20.22	
Francis Boott (part),	190.00	
Bowdoin Prizes for Dissertations,	1,562.96	
Boylston Prizes for Elocution,	135.56	
Coolidge Debating,	233.24	
John Craig (gift),	250.00	
Lloyd McKim Garrison,	131.63	
Edward Hopkins Gift for "Deturs":		
Interest on balance,	\$109.32	
From Trustees,	230.79	340.11
George Arthur Knight,	53.01	
Susan Anthony Potter Prizes (gift),	225.00	
Sales,	56.89	
John O. Sargent,	136.87	
George B. Sohler (part),	250.00	
Charles Sumner,	206.27	
Robert N. Toppan,	191.14	
Philip Washburn,	118.15	
Amounts carried forward,	\$4,294.80	\$414,898.92

COLLEGE (CONTINUED)

INCOME

Amounts brought forward, \$4,394.80 \$414,898.92

Income of Prize Funds, and Gifts for Prizes
(continued).

Elizabeth Wilder,	26.04	
Wister,	16.59	4,337.43

Income of Sundry Funds for Special Purposes:

Botanic Department (part):

‡ for Cryptogamic Herbarium, . . .	\$482.88	
‡ for Laboratories of Botany, . . .	241.17	\$728.50
William H. Baldwin, Jr., 1885,		280.72
Caroline M. Barnard Bequest,		72.75
Francis Boott (part),		317.31
Francis James Child Memorial,		544.41

Classical Publication Fund of the Class of 1856:

Interest,	\$344.59	
Sales,	145.69	490.28
Book Fund of the Class of 1881,		174.50
Class of 1883 Special,		12.90
Cryptogamic Herbarium,		165.19
George A. Gardner,		291.53
George Silsbee and Ellen Sever Hale, .		311.71

Harvard Oriental Series:

Interest,	741.57	
Solomon Lincoln Bequest,	273.73	
Joseph Lovering for Physical Research, .	374.42	
Music Department,	63.15	
Francis Greenwood Peabody (part), . .	1,857.18	
James Mills Peirce Bequest,	21.10	
Nelson Robinson, Jr. Additional (part), .	9.82	
Robert W. Sayles,	242.50	
Sayles, for Summer Course in Geology, . .	510.80	
George William Sawin,	267.88	
Shaler Memorial,	1,628.19	
Elizabeth Torrey,	59.56	

Henry Warren Torrey:

Interest,	741.57	
Unknown Memorial (part),	1,800.00	
Samuel Ward,	855.44	
Cyrus M. Warren,	318.50	
Henry C. Warren (part),	1,781.83	
David A. Wells (part),	647.15	
Chauncey Wright,	65.67	

Amounts carried forward, \$15,754.57 \$419,236.35

COLLEGE (CONTINUED)

INCOME

Amounts brought forward,	\$15,754.57	\$419,286.35
Income of Sundry Funds for Special Purposes		
<i>(continued).</i>		
Jefferson Physical Laboratory :		
Interest on balance,	152.05	
Physical Laboratory Endowment (interest), . . .	3,627.50	
T. Jefferson Coolidge for Research in Physics,	2,500.00	22,084.12
Sundry Gifts, Fees, etc., for Special Purposes.		
For the Department of Botany :		
Gift of John S. Ames,	\$350.00	
For the Department of Classics :		
Gift for Advances to Classical Department, .	200.00	
Sales of publications,	138.65	
For the Department of Economics :		
Gift for Department,	\$1,300.00	
Interest,	6.75	1,306.75
For the Department of English :		
Gift for publications,	1,550.00	
For the Department of Government :		
Gift of Frank Graham Thomson, . .	5,000.00	
For the Department of History (History 1) :		
Sales of publications,	\$240.28	
Interest,	26.80	267.08
For the Department of Mathematics :		
Sales of publications,	574.62	
For the Department of Music :		
John K. Paine Memorial — Royalties on		
publications,	5.48	
Gift for Department,	560.00	
For the Department of Philosophy :		
Gifts for Department Library,	200.00	
Sales of Psychological Review,	23.99	
For the Department of Physics :		
Fellowship for Research in Physics — interest	44.16	
For the Department of Sanskrit :		
Interest,	\$42.38	
Sales of publications,	205.65	248.03
For the Department of Semitic :		
Gift for Library,	1,000.00	
For the Department of Ethics of Social Questions :		
Anonymous Gift for Department, \$3,500.00		
Interest,	54.68	
Sales of publication,	495.03	4,049.71
Special Gift for Department Library, . . .	300.00	
Gift for furnishing rooms — interest,	13.98	
Amounts carried forward,	\$15,827.45	\$441,681.77

COLLEGE (CONTINUED)

INCOME

Amounts brought forward,	\$15,827.45	\$441,681.77
Sundry Gifts, Fees, etc., for Special Purposes (continued).		
For the Department of Zoölogy :		
Gift for Bermuda Biological Station, \$500.00		
Interest,	21.60	521.60
For the School for Social Workers :		
Gift,	\$3,750.00	
Interest,	51.45	
Tuition fees,	100.00	3,901.45
Gift Harvard Alumni Association— travelling expenses,		50.00
Gift Plantation of Shrubs, interest,	74.58	20,375.08
Receipts from students.		
Tuition Fees — Regular Programme :		
College Regular,	\$301,753.00	
“ Special,	9,865.00	
Unclassified,	13,586.00	\$325,204.00
Tuition Fees — Additional Courses :		
College Regular,	\$31,173.34	
“ Special,	1,033.74	
Unclassified,	710.00	32,917.08
Tuition — Regular Programme :		
Graduate School of Arts and Sci- ences,	\$52,881.00	
Radcliffe students in University courses,	2,105.00	
For afternoon and Saturday courses for teachers,	15.00	
Summer Schools in Cambridge, .	21,277.67	76,278.67
Registration Fees :		
Summer Schools in Cambridge,		1,610.00
Auditors' Fees :		
Summer Schools in Cambridge, .	\$850.00	
College,	50.00	900.00
Examination fees :		
Admission,	\$10,345.00	
Condition, make-up and advanced standing,	2,742.00	
Doctor of Philosophy,	80.00	13,117.00
Graduation fees,		8,120.00
Laboratory fees :		
Astronomy,	\$895.00	
Botany,	1,277.50	
Amounts carried forward, .	\$2,172.50	\$458,146.75
		\$461,645.55

COLLEGE (CONTINUED)

INCOME

Amounts brought forward, . . .	\$2,172.50	\$458,146.75	\$461,645.55
Receipts from Students (<i>continued</i>).			
Chemistry,	14,649.37		
Geology,	1,460.00		
Mineralogy,	322.50		
Music,	70.00		
Hygiene,	1,845.00		
Physics,	3,265.00		
Psychology,	100.00		
Zoölogy,	1,205.00	25,089.37	
College Dormitories: Hollis, Stoughton, Holworthy, Thayer, Weld, Wadsworth House, Walter Hastings, Perkins, and Conant,	\$70,687.72		
Matthews Hall,	12,964.00		
	<u>\$83,651.72</u>		
Less $\frac{1}{2}$ net income from Matthews Hall, credited under income of Matthews Scholarship,	3,954.84	79,696.88	
Summer School excursions,		87.71	
Amount collected on account of unpaid term-bills previously charged off,		200.42	563,221.13
Sundries :			
Sale of University Hymn Book,	\$49.55		
" Address List,	2.25		
" Manual American History,	169.79		
" Annals of Mathematics,	354.80		
" old examination papers,	356.95		
" other publications,	525.20		
" Commencement Lunch tickets,	506.00		
Board from students at Mining Camp,	55.00		
Sale of Historical Monographs,	1.57		
Use of typewriters,	2.52		
Duplicate diplomas,	15.00		
Sale of photographs,	45.31	2,088.94	
		<u><u>\$1,026,950.62</u></u>	

EXPENDITURE

From Fellowship Funds and Gifts.

Edward Austin,	\$2,000.00
Cercle Français de l'Université Harvard,	600.00
Ozias Goodwin Memorial,	525.00
Amount carried forward,	<u>\$3,125.00</u>

COLLEGE (CONTINUED)

EXPENDITURE

Amount brought forward,	\$3,125.00	
From Fellowship Funds and Gifts (<i>continued</i>).		
Edward William Hooper,	1,150.00	
John Thornton Kirkland,	500.00	
Henry Lee Memorial,	525.00	
Woodbury Lowery,	800.00	
MacDowell,	600.00	
Charles Eliot Norton,	800.00	
Robert Treat Paine,	600.00	
John Parker,	2,250.00	
Francis Parkman,	450.00	
Rogers,	1,500.00	
Henry Bromfield Rogers Memorial, . . .	525.00	
Frederick Sheldon (part),	14,596.35	
South End House,	300.00	
South End House Fellowship in Social Education,	300.00	
James Walker,	500.00	
Whiting,	900.00	
Adams Woods Fellowship,	400.00	29,821.35
From Scholarship Funds and Gifts.		
Abbot,	\$175.00	
Edward Austin Scholarships for Teachers, .	3,465.00	
Bartlett,	250.00	
Bassett,	180.00	
Charles Sumner Bird,	200.00	
Bigelow,	600.00	
Bowditch,	5,291.67	
W. G. Bowdoin, Jr., Scholarship,	250.00	
Bright (part),	1,325.00	
Browne,	175.00	
Morey Willard Buckminster,	250.00	
Burr,	1,520.00	
Ruluff Sterling Choate,	275.00	
George Newhall Clark,	500.00	
Class of 1802,	375.00	
" 1814,	150.00	
" 1815 (Kirkland),	300.00	
" 1817,	200.00	
" 1828,	200.00	
" 1835,	225.00	
" 1841,	225.00	
" 1852 (Dana),	225.00	
" 1856,	700.00	
" 1877,	225.00	
" 1883,	275.00	
Amounts carried forward,	\$17,556.67	\$39,821.35

COLLEGE (CONTINUED)

EXPENDITURE

Amounts brought forward, . . .		\$17,556.67	\$29,821.85
From Scholarship Funds and Gifts (continued).			
Crowninshield,	660.00		
Warren H. Cudworth,	600.00		
George and Martha Derby,	250.00		
Julius Dexter,	225.00		
Orlando W. Doe,	100.00		
William Samuel Eliot,	83.33		
George H. Emerson,	349.50		
Joseph Eveleth (part),	400.00		
Fall River,	100.00		
Farrar,	275.00		
George Fisher and Elizabeth Huntington			
Fisher,	200.00		
Richard Augustine Gambrill,	525.00		
Charles Haven Goodwin,	350.00		
Benjamin D. Greene,	80.00		
Mary Forbes Greene,	800.00		
Price Greenleaf (part),	3,000.00		
Harvard Club of Boston,	1,000.00		
" " Buffalo,	200.00		
" " Chicago,	300.00		
" " Cleveland,	400.00		
" " Connecticut Valley,	200.00		
" " Fitchburg,	158.50		
" " Hawaii,	200.00		
" " Hingham,	100.00		
" " Indiana,	200.00		
" " Lowell,	300.00		
" " Lynn,	100.00		
" " Milwaukee,	200.00		
" " Nebraska,	150.00		
" " New Jersey,	250.00		
" " Western Pennsylvania,	300.00		
" " San Francisco,	500.00		
" " Washington,	250.00		
" " Worcester,	200.00		
John Appleton Haven,	475.00		
William Hilton (part),	225.00		
Ebenezer Rockwood Hoar,	500.00		
Levina Hoar, for the town of Lincoln,	240.00		
R. M. Hodges (part),	275.00		
Hollis,	275.00		
Huidekoper Scholarship,	200.00		
Henry B. Humphrey,	500.00		
Amounts carried forward,		\$32,758.00	\$29,821.85

COLLEGE (CONTINUED)

EXPENDITURE

Amounts brought forward,		\$32,753.00	\$29,821.35
<i>From Scholarship Funds and Gifts (continued).</i>			
Charles L. Jones,	1,305.00		
George Emerson Lowell,	450.00		
Markoe,	250.00		
Matthews,	4,500.00		
William Merriek,	275.00		
Morey,	375.00		
Lady Mowison,	250.00		
Howard Gardner Nichols,	250.00		
Lucy Osgood,	275.00		
George Foster Peabody,	250.00		
O. E. Perkins Scholarship,	1,300.00		
Rebecca A. Perkins,	200.00		
Philadelphia,	700.00		
Special Scholarship in Philosophy,	300.00		
Wendell Phillips Memorial,	75.00		
William Reed,	175.00		
Ricardo Prize Gift,	350.00		
Henry Bromfield Rogers,	150.00		
Nathaniel Ropes, Jr.,	475.00		
James A. Rumrill,	450.00		
Edward Russell,	250.00		
Sales,	250.00		
Saltonstall,	525.00		
Leverett Saltonstall,	400.00		
Mary Saltonstall,	300.00		
James Savage (part),	300.00		
Sever,	150.00		
Sewall,	500.00		
Shattuck,	2,100.00		
Slade,	275.00		
Dunlap Smith,	200.00		
Story,	200.00		
Stoughton,	150.00		
Thayer,	3,000.00		
Gorham Thomas,	200.00		
Toppan,	350.00		
Townsend,	1,000.00		
Walcott,	200.00		
Christopher M. Weld,	500.00		
Jacob Wendell,	300.00		
Whiting,	550.00		
Josiah Dwight Whitney,	242.50		
Mary L. Whitney,	500.00		
Amounts carried forward,		\$57,450.50	\$29,821.35

COLLEGE (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$57,450.50	\$39,831.35
From Scholarship Funds and Gifts (<i>continued</i>).		
Willard,	475.00	
Charles Wyman,	450.00	58,375.50
From Beneficiary and Loan Funds and Gifts.		
Rebecca C. Ames,	\$2,470.00	
Anonymous Gift for Special Aid,	80.00	
Edward Austin Loan (Special Students),	100.00	
Frank Bolles Memorial,	100.00	
Daniel A. Buckley (part),	2,940.00	
Walter Channing Cabot,	2,500.00	
Edward Erwin Coolidge (part),	564.88	
Moses Day,	265.49	
Calvin and Lucy Ellis Aid (part),	2,375.00	
Exhibitions,	65.67	
Fines, Loan Fund,	1,764.71	
Freshman Loan,	1,755.15	
Price Greenleaf Aid,	15,879.84	
Edwin A. W. Harlow,	558.34	
Robert Henry Harlow,	272.38	
Student Fund of the Harvard Engineering Society of New York,	75.00	
Bertram Kimball,	1,000.00	
Harry Milton Levy Loan,	505.00	
The Loan,	6,125.00	
Susan B. Lyman,	200.00	
Munroe,	676.00	
Palfrey Exhibition,	160.00	
Dr. Andrew P. Peabody Memorial,	251.00	
Scholarship and Beneficiary Money Returned,	4,910.00	
Quincy Tufts,	541.84	45,584.70
From Prize Funds and Gifts for Prizes.		
Jeremy Belknap,	\$100.00	
Francis Boott (part),	90.00	
Bowdoin Prizes for Dissertations,	1,490.80	
Boylston Prizes for Elocution,	255.25	
Coolidge Debating,	270.12	
John Craig,	250.00	
Lloyd McKim Garrison,	108.72	
Edward Hopkins Gift for "Deturs,"	285.96	
Menorah Society,	200.00	
Patria Society,	50.00	
Susan Anthony Potter Prizes,	225.00	
Sales,	45.00	
John O. Sargent,	200.00	
Amounts carried forward,	\$8,570.85	\$138,781.55

COLLEGE (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$3,570.85	\$133,781.55
From Prize Funds and Gifts for Prizes (<i>continued</i>).		
George B. Schier,	500.00	
Charles Sumner,	100.00	
Philip Washburn,	150.00	4,320.85
For University Scholarships.		
Undergraduate :		
Normal,	\$600.00	
Graduate School of Arts and Sciences,	6,120.00	6,720.00
From Sundry Funds and Balances for Special Purposes.		
Francis Boott, books for the Department of Music,	\$318.57	
Francis James Child Memorial, books,	459.02	
Classical Publication Fund of the Class of 1856 :		
Harvard Studies in Classical Philology,	31.44	
T. Jefferson Coolidge for Research in Physics,	2,997.08	
Book Fund of the Class of 1881, books for the Department of Chemistry,	184.26	
George A. Gardner, for photographs, etc., for the Department of Geology,	224.20	
Harvard Alumni Association, for travelling expenses,	50.00	
Harvard Oriental Series, publications,	772.81	
Harvard Economic Studies,	2,337.98	
Harvard Psychological Review, printing,	86.22	
History Publication Fund (History 1), books,	577.04	
Joseph Lovering for Physical Research,	281.20	
Mathematics Publication Fund, books,	84.15	
Francis G. Peabody,	\$5,877.04	
Less amount paid for salaries,	3,000.00	2,877.04
Nelson Robinson Jr. Additional (part).		
Psychological Laboratory,	\$1,594.22	
Books,	280.89	
Expenses,	34.79	
Librarian Department Philosophy,	1,000.00	
	\$2,909.90	
Less paid for salaries,	1,000.00	1,909.90
Robert W. Sayles for Department of Geology,	235.46	
Shaler Memorial,	1,700.00	
Henry Warren Torrey, publications,	602.04	
Unknown Memorial (part), services and expenses,	1,939.21	
Cyrus M. Warren, research in Chemistry,	209.57	
Henry C. Warren, publications and books,	1,466.86	
Summer Course in Geology,	1,043.85	
Amounts carried forward,	\$20,187.90	\$144,822.40

COLLEGE (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$30,187.90	\$144,823.40
From Sundry Funds and Balances for Special Purposes (<i>continued</i>).		
Jefferson Physical Laboratory :		
Services and wages,	\$1,355.75	
Office supplies and expenses, . .	110.41	
Operating expense,	\$5,904.23	
Less paid from General		
Income,	600.00	5,304.23
University charge :		
Treasurer's Office, care of invest-		
ments,	81.68	
Bursar's Office, collections and pay-		
ments,	128.32	
Watchmen,	78.66	6,959.05
		27,146.95
From Gifts and Fees, etc., for Special Purposes.		
For Department of Economics :		
Gift for Department,	\$728.04	
Arthur T. Lyman, maps and charts, . .	24.18	
For Department of Mineralogy, Gift for exhibits,	9.60	
For Department of Mathematics :		
Gift for Expenses of Commission on teaching		
Mathematics,	100.00	
For Department of Chemistry :		
Edward Mallinckrodt gift,	75.00	
For Department of Philosophy :		
Philosophical Library Books,	202.18	
For Department of Ethics Social Questions, . .	1,098.80	
Furnishings for the Department of Social Ethics,	68.23	
For Division of Music,	485.84	
For Department of Physics, Physical Research, .	49.79	
Fellowship in Physical Research, .	\$500.00	
Less paid for salaries,	500.00	
Department of Botany, John S. Ames Gift, .	94.50	
" Zoölogy, Bermuda Biological Sta-		
tion,	369.25	
Department of Geology, Exhibition Case for		
Photographs,	29.31	
Semitic Library, books,	132.15	
Department of Classics, books,	196.05	
School for Social Workers,	\$2,944.30	
Less paid for salaries,	2,000.00	944.30
Department of Government :		
Anonymous gift for Research,	325.00	
Amounts carried forward,	\$4,932.17	\$171,969.35

COLLEGE (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$4,932.17	\$171,969.35
From Gifts and Fees, etc., for Special Purposes (continued).		
Gift F. G. Thomson,	\$4,523.20	
Less paid for salaries,	4,000.00	523.20
		5,455.37
Administration Offices.		
Dean of the Faculty of Arts and Sciences :		
Salary,	\$500.00	
Services and wages,	661.50	
Office supplies and expenses,	200.44	
Sundries,	1.36	1,363.30
Dean of Harvard College :		
Salaries,	\$11,020.84	
Services and wages,	7,680.42	
Office supplies and expenses,	2,558.19	
Sundries,	57.10	21,316.55
Dean and Secretary of the Graduate School of Arts and Sciences :		
Salaries,	\$2,500.00	
Services and wages,	688.15	
Office supplies and expenses,	769.12	3,957.27
Dean of the Graduate School of Business Administration :		
Salary,		1,000.00
Secretary of the Faculty of Arts and Sciences :		
Salaries,	\$3,000.00	
Services and wages,	1,430.75	
Office supplies and expenses,	1,111.69	
Sundries,	8.06	5,545.50
From Appropriations.		
Anthropology,	\$50.00	
Astronomy,	30.67	
Botany,	7,305.74	
Classics,	800.00	
Comparative Literature,	42.80	
Economics,	\$942.94	
Office expenses,	600.00	1,542.94
Education,	82.43	
English,	302.67	
Fine Arts,	588.12	
French and other Romance Languages,	1,397.25	
Geology,	150.00	
German,	543.34	
History,	1,063.00	
Mathematics,	462.10	
Amounts carried forward,	\$14,361.06	\$210,607.34

COLLEGE (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$14,861.06	\$210,607.84
From Appropriations (continued).		
Mineralogy and Petrography,	378.75	
Music,	150.00	
Physics,	711.61	
Psychology,	149.43	
Zoölogy,	1,792.21	17,548.06
From Laboratory Fees.		
Astronomy,	\$602.49	
Botany,	1,062.47	
Chemistry,	14,898.14	
Geology,	1,302.80	
Hygiene,	1,525.04	
Mineralogy,	838.11	
Music,	70.00	
Physics,	3,365.00	
Psychology,	100.00	
Zoölogy,	1,205.00	23,863.55
For College Public Buildings, which are not valued in the Treasurer's books.		
Repairs and Equipment,	\$8,819.09	
Caretaking and Operating Expenses,	21,546.99	29,866.08
For College Dormitories, Hollis, Stoughton, Holworthy, Thayer, Weld, Wadsworth House, Walter Hastings, Perkins, and Conant, which are not valued in the Treasurer's books; and for Matthews Hall.		
Repairs and Equipment,	\$10,928.89	
Caretaking and Operating Expenses,	28,510.11	39,439.00
Summer School.		
Dean's Office:		
Salary of Dean,	\$1,000.00	
Services and wages,	975.86	
Office supplies and expenses,	1,053.43	
Sundries,	38.40	\$3,067.19
Salaries,		17,318.00
Services and wages,		228.50
Office supplies and expenses,		721.57
Receptions,		390.32
Extra Janitor service,		54.10
Remission of Tuition Fees,		140.00
Sundries,		88.29
School of Physical Education,		5,839.37
Amounts carried forward,	\$27,847.84	\$321,319.03

COLLEGE (CONTINUED)

EXPENDITURE

Amounts brought forward,		\$27,347.34	\$321,319.03
Summer School (<i>continued</i>).			
University charge :			
Bursar's Office, collections and pay-			
ments,	\$454.40		
Publication Office, salaries and ex-			
penses,	236.91	691.31	28,086.65
General.			
Salaries for Instruction :			
Edward Austin (part) :			
Austin Teaching Fellowships, \$12,500.00			
From Sundry Funds and Gifts, . 210,178.74			
From General Income, 260,186.89			
	\$482,865.63		
Services and wages,	5,365.49		
Proctors,	2,507.83		
Equipment and supplies,	1,047.02		
Blue-books,	522.50		
Printing,	6,472.25		
Pension for Bell-Ringer,	625.00		
Diplomas,	882.35		
Rooms for Visiting German Professor,	465.54		
Office Expenses, Lawrence Hall,	959.45		
Installation new boiler in Peabody Museum			
in 1909-10,	1,883.74		
Monitorships,	1,229.90		
Special lecturers,	600.00		
Subscription to American School of Classical			
Studies,	250.00		
Music Class Day,	125.00		
Fees for Summer Mining Camp received in 1909-10			
and now paid to the Camp,	625.00		
Collection of term-bills,	95.79		
Refreshments at Faculty Meetings,	84.41		
Tuition fees of Students at Massachusetts Institute			
of Technology,	210.00		
College Entrance Examination Board,	100.00		
Graduate School Reception,	87.50		
Sundries,	929.10		507,933.50
Printing Office.			
Services and wages,	\$21,440.67		
Supplies and equipment,	18,289.91		
Printing,	7,159.78		
Repairs,	739.55		
Water, heat, light, and protection,	405.40		
Binding,	6,631.86		
Amounts carried forward,		\$54,667.17	\$857,291.18

COLLEGE (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$54,667.17	\$857,291.18
General (continued).		
New press and changes in office,	3,156.12	
Sundries, freight, etc.,	115.97	
	<u>\$57,989.26</u>	
Less sales to Departments,	56,677.59	1,261.67
Admission Examinations.		
Cambridge :		
Services and wages,	\$3,059.72	
Reading books,	5,185.63	
Office supplies and expenses,	1,478.19	
Sundries,	588.77	10,807.81
Advertising, Graduate School of Arts and Sciences,		46.00
Annals of Mathematics,		2,789.96
Payments made from College Income for the following accounts :		
Jefferson Physical Laboratory, Schedule 8,	\$600.00	
Graduate School of Applied Science, Schedule 11,	76,127.85	
Museum of Comparative Zoölogy, Schedule 23,	3,746.25	
Peabody Museum of American Archaeology and Ethnology, Schedule 24,	229.42	
William Hayes Fogg Art Museum, Schedule 27,	2,630.12	
Appleton Chapel, Schedule 28,	442.14	
Phillips Brooks House, Schedule 29,	1,191.12	
Hemenway Gymnasium, " 30,	7,726.14	92,698.04
University charge.		
President's Office, salaries and expenses,	\$7,188.40	
Treasurer's Office, care of investments,	5,976.21	
Bursar's Office :		
Collections and payments,	\$12,126.78	
Letting College rooms,	800.00	12,926.78
Employment Office and Teachers' Agency, salaries and expenses,	5,096.72	
Medical Adviser, salary and expenses,	2,212.89	
Inspector of Grounds and Buildings, salary and expenses,	3,437.65	
Publication Office, salary and expenses,	2,221.04	
40% Quinquennial Catalogue,	2,124.13	
57% Annual Catalogue,	2,389.23	
90% Memorial Hall and Sanders Theatre, expenses for the building,	1,741.57	
Watchmen,	1,995.44	
Amounts carried forward,	\$47,259.51	\$964,389.16

COLLEGE (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$47,259.51	\$964,389.16
University charge (<i>continued</i>).		
Labor, etc.,	7,458.95	
Alumni Office,	1,767.52	
Engineer,	1,143.51	
Janitor,	1,997.92	59,627.41
		<u>\$1,024,016.57</u>
General surplus made up as follows:		
Restricted Income unused carried to		
Funds and Gifts,	\$38,909.00	
General Suspense,	6,366.84	
		<u>\$35,275.84</u>
Less General Deficit made up as follows:		
Advances to Funds and Gifts		
carried to General Suspense,	\$5,716.83	
Deficit carried to Schedule 10,	26,624.96	32,341.79
		<u>2,934.05</u>
		<u><u>\$1,026,950.62</u></u>

SCHEDULE 9

LIBRARY

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of Book Funds and Gifts and Receipts for the purchase of books.

Nathaniel I. Bowditch,	\$102.09
Bright Legacy ($\frac{1}{4}$ income),	\$1,212.50
" Balance (interest),	2.86
William B. Castle,	61.46
Edwin Conant ($\frac{1}{4}$ income),	888.24
Constantius ($\frac{1}{4}$ income),	627.88
Archibald C. Coolidge and Clarence L. Hay	208.89
W. Bayard Cutting Bequest,	420.20
Bayard Cutting Fellowship,	505.20
Denny,	256.42
Elisa Farrar,	271.81
Charles Gross Memorial,	44.87
Price Greenleaf (part),	1,000.00
Horace A. Haven,	163.86
Francis B. Hayes,	485.44
George Hayward,	260.74
Amount carried forward,	\$5,961.96

LIBRARY (CONTINUED)

INCOME

Amount brought forward,	\$5,961.96	
Income of Book Funds and Gifts and Receipts for the purchase of books (<i>continued</i>).		
Thomas Hollis,	113.88	
Sidney Homer,	105.39	
Jarvis,	24.93	
Frederick A. Lane,	255.21	
George C. Lodge and Joseph Trumbull Stickney Memorial,	23.15	
Lowell,	1,377.16	
Charles Minot,	2,911.36	
Charles Eliot Norton,	434.32	
Lucy Osgood,	344.55	
Mary Osgood,	338.24	
Francis Parkman Memorial,	271.88	
George F. Parkman,	1,223.41	
Francis Sales,	189.97	
Salisbury,	262.82	
Sever,	995.95	
Samuel Shapleigh,	191.58	
George B. Schier (part),	108.08	
Strobel Memorial (Class of 1877),	126.00	
Strobel Memorial (Siam),	94.24	
Subscription,	509.80	
Charles Sumner,	1,811.28	
Kenneth Matheson Taylor,	250.21	
Daniel Treadwell ($\frac{1}{2}$ income),	289.18	
John Harvey Treat Book Fund,	899.85	
Ichabod Tucker,	214.79	
20th Mass. Regiment of Volunteer Infantry,	15.08	
Wales Income for Books,	170.29	
James Walker,	774.01	
Thomas W. Ward,	254.63	
Julian Palmer Welsh Memorial,	138.51	
J. Huntington Wolcott,	970.00	
Gifts for books. Gifts,	\$10,429.58	
Interest,	172.17	10,601.75
Sale of duplicate books,	285.04	
Received for books lost,	135.05	\$32,618.05
Income of R. M. Hodges Fund (part).		
For publishing bibliographical contributions,		433.69
Income of Funds for general purposes.		
Daniel Austin,	\$378.64	
Edwin Conant ($\frac{1}{2}$ income),	1,014.72	
Constantius ($\frac{1}{2}$ income),	627.88	
Amounts carried forward,	\$2,021.24	\$33,051.74

LIBRARY (CONTINUED)

INCOME

Amounts brought forward,	\$2,021.24	\$33,051.74
Income of Funds for general purposes (<i>continued</i>).		
Fund of the Class of 1851,	41.06	
" " " " (C. F. Dunbar's Gift),	40.45	
Price Greenleaf (part),	15,944.54	
Henry L. Pierce,	2,425.00	
Henry L. Pierce, Residuary (part),	2,866.59	
Stephen Salisbury Bequest,	248.32	
James Savage (part),	1,302.75	
Daniel Treadwell ($\frac{1}{2}$ income),	289.18	
Eben Wright,	4,850.00	29,529.15
Fees for use of Library,	\$105.00	
Fines,	549.35	
Gifts for additional service,	1,600.00	
Gift for cases,	2,000.00	
Gifts for general use,	13.25	
Sales of Bibliographical Contributions,	8.94	
Sales of Sundry publications,	2.43	4,273.97
		<u>\$66,854.86</u>
General Deficit, made up as follows:		
Advances to Funds, carried to General Suspense,	\$207.22	
Deficit carried to Schedule 10,	36,325.64	
	<u>\$36,532.86</u>	
<i>Less</i> Restricted Income unused, added to		
Funds and Gifts,	\$3,954.22	
carried to General Suspense to repay		
former advances,	773.51	4,727.73
		<u>31,805.13</u>
		<u>\$33,659.99</u>

EXPENDITURE

For Books, from the following Funds, Gifts, etc.		
Bowditch,	\$50.84	
Bright,	960.95	
Castle,	5.79	
Edwin Conant,	333.26	
Constantius,	707.08	
W. Bayard Cutting Bequest,	411.00	
Bayard Cutting Fellowship,	487.50	
Denny,	206.40	
Farrar,	292.70	
Price Greenleaf (part),	926.67	
Charles Gross Memorial,	30.86	
Haven,	362.31	
Hayes,	438.77	
Amount carried forward,	\$5,211.18	

LIBRARY (CONTINUED)

EXPENDITURE

Amount brought forward,	\$5,211.18	
For Books, from the following Funds, Gifts, etc. (continued).		
Hayward,	286.98	
Hollis,	77.71	
Homer,	187.20	
Jarvis,	35.87	
Lane,	182.07	
Lowell,	826.28	
Minot,	3,007.22	
Charles Eliot Norton,	184.09	
Lucy Osgood,	235.01	
Mary Osgood,	281.05	
Francis Parkman Memorial,	303.29	
George F. Parkman,	1,285.63	
Sales,	144.74	
Salisbury,	192.39	
Sever,	1,148.30	
Shapleigh,	179.42	
George B. Sohler (part),	6.84	
Strobel Memorial (1877),	14.69	
“ “ (Siam),	19.11	
Subscription,	428.91	
Sumner,	1,717.98	
Kenneth Matheson Taylor,	338.92	
Daniel Treadwell,	370.52	
John Harvey Treat,	42.97	
Tucker,	182.92	
Wales,	273.54	
Walker,	329.09	
Ward,	315.26	
Julian Palmer Welsh Memorial,	75.00	
J. Huntington Wolcott,	834.32	
From Sundry gifts for books (balances),	9,757.55	
Duplicate money and receipts for lost books,	367.47	
Fines,	1,800.07	\$30,438.54
From R. M. Hodges Fund, publishing bibliographical contributions,		922.14
General.		
Salaries,	\$23,208.33	
Services and wages (part),	23,664.01	
Equipment and supplies,	2,684.13	
Stationery, postage, telephone and telegraph,	783.92	
Binding,	4,521.99	
Freight, express, etc.,	568.19	
Amounts carried forward,	\$55,430.57	\$31,360.68

LIBRARY (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$55,480.57	\$31,360.68
General (<i>continued</i>).		
Moving and cleaning books,	359.50	
Laundry,	42.50	
Sundries,	895.92	
Special Reference Libraries, services,	1,451.90	
Repairs and equipment, land and building,	2,041.70	
Caretaking, land and building,	4,486.24	64,208.33
From Gifts.		
Additional service in main library,		1,401.43
University charge:		
Treasurer's Office, care of investments,	\$747.08	
Bursar's Office, collections and payments,	439.90	
Inspector of Grounds and Buildings, salary and expenses,	220.66	
Annual Catalogue,	12.58	
Watchmen,	184.00	
Engineer,	85.38	1,689.55
		<u>\$98,659.99</u>

SCHEDULE 10

UNIVERSITY, COLLEGE, AND LIBRARY
COMBINED ACCOUNTS

For the year ended June 30, 1911

Deficit in College, Schedule 8,	\$26,624.96	
Deficit in Library, Schedule 9,	86,825.64	\$63,950.60
Surplus in University, Schedule 7,		<u>34,417.76</u>
Deficit met by the unrestricted principal of the Walter F.		
Baker Fund,		<u>\$28,532.84</u>

SCHEDULE 11

GRADUATE SCHOOL OF APPLIED SCIENCE

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of Funds for Instruction or for General Purposes.

Edward Austin (part) :

Austin Teaching Fellowships,	\$1,500.00	
Henry Flynt (part),	4.85	
James Lawrence (part),	1,321.59	
Gordon McKay Endowment,	60,612.82	
Professorship of Engineering,	1,979.09	
Nelson Robinson, Jr. (part),	21,118.48	
Arthur Rotch,	1,212.50	
Gurdon Saltonstall,	2,910.00	
Josiah Stickney,	571.91	\$91,125.73

Income of Fellowship Funds.

Julia Amory Appleton,	\$1,014.67	
Nelson Robinson, Jr. (part),	983.32	
Frederick Sheldon (part),	1,200.00	3,197.99

Income of Scholarship Funds.

Edward Austin (part) :

Austin Scholarships in Architecture,	\$900.00	
Bright (part),	250.00	
Daniel A. Buckley (part),	150.00	
Francois H. Cummings,	318.89	
Joseph Eveleth (part),	600.00	
William Hilton (part),	225.00	
Priscilla Clark Hodges,	203.55	
Hennen Jennings,	573.27	
Henry Weidemann Locke (gift),	100.00	
Mining and Metallurgy Department (gift),	499.92	
Edward Dyer Peters (gift),	250.00	4,070.63

Income Loan Funds and Repayments.

Lawrence Scientific School Loans repaid :

Interest,	\$222.71	
Loans repaid,	2,671.65	
Gift,	50.00	\$2,944.36

Susan B. Lyman (L.S.S.) :

Interest,	\$96.82	
Loans repaid,	27.00	123.82
		3,068.18

Income Sundry Funds and Gifts for Special Purposes.

Department of Architecture :

Nelson Robinson, Jr. Fund (part),	\$4,335.72	
Gift for Equipment (interest),	251.00	
N. Robinson special gift for salary :		
Gift,	\$15,000.00	
Interest,	196.04	15,196.04

Amounts carried forward, \$19,782.76 \$101,462.52

GRADUATE SCHOOL OF APPLIED SCIENCE (CONTINUED)

INCOME

Amounts brought forward,	\$19,782.76	\$101,462.52
Income Sundry Funds and Gifts for Special Purposes (continued).		
Department of Engineering:		
Engineering Camp at Squam Lake,	18,916.81	
Department of Forestry:		
Gift for Division of Forestry,	5,455.00	
Sales lumber, wood, etc.,	\$486.73	
Lodgings at Forestry House,	146.00	
Interest on balance,	26.72	609.45
Nelson Robinson, Jr., Special Expense Gift:		
Sale of Manual of Northern Woodsmen,	\$748.25	
Interest on balance,	92.04	840.29
Department of Mining and Metallurgy:		
Summer School Mining Camp—interest,	24.71	45,629.02
Receipts from Students.		
Tuition fees,	\$17,185.00	
Graduation fees,	800.00	
Laboratory fees:		
Engineering,	\$1,093.50	
Forestry,	95.00	
Mining and Metallurgy,	2,836.17	3,524.67
Shop-work fees,	1,059.00	22,568.67
Sundries.		
Amount contributed from the General Funds of Harvard College for Salaries and Expenses,	\$76,127.85	
Amount contributed by Bussey Institution to pay salary of instructor in Landscape Architecture,	1,800.00	77,927.85
		<u>\$247,588.06</u>

EXPENDITURE

From Fellowship Funds.		
Julia Amory Appleton,	\$1,000.00	
Nelson Robinson, Jr.,	988.82	
Frederick Sheldon (part),	1,200.00	\$3,183.32
From Scholarship Funds and Gifts.		
Edward Austin Scholarships in Architecture,	\$900.00	
Bright,	250.00	
Daniel A. Buckley,	150.00	
Francis H. Cummings,	275.00	
Joseph Eveleth,	600.00	
William Hilton (part),	225.00	
Priscilla Clark Hodges,	175.00	
Hennen Jennings,	525.00	
Amounts carried forward,	\$3,100.00	\$3,183.32

GRADUATE SCHOOL OF APPLIED SCIENCE (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$3,100.00	\$3,183.32
From Scholarship Funds and Gifts (<i>continued</i>).		
Mining and Metallurgy Department Scholarship		
(gift),	150.00	
Edward Dyer Peters,	250.00	3,500.00
From Loan Funds.		
Edward Austin Loans repaid,	\$60.00	
Lawrence Scientific School Loans repaid,	260.00	320.00
For University Scholarships.		
Architectural League,	\$450.00	
General,	1,770.00	2,220.00
From Sundry Funds and Gifts for Special Purposes.		
Department of Architecture :		
Equipment,	\$1,028.39	
Nelson Robinson, Jr. :		
Expense of Nelson Robinson, Jr.		
Hall,	\$3,925.17	
University charge :		
Bursar,	\$41.75	
Inspector of Grounds and		
Buildings,	125.86	
Janitor,	89.85	
Engineer,	48.50	
Watchman,	104.59	410.55
		4,335.72
Department of Engineering :		
Gift for Electrical Apparatus, . . . . .	.13	
Engineering Camp at Squam Lake,	18,345.20	
Department of Forestry :		
John S. Ames gift,	15.00	
Ames Butler gift,	\$2,717.69	
Less amount paid for salaries, 2,000.00	717.69	
Operations,	3,085.77	
House account,	186.07	
Nelson Robinson, Jr. special expense gift,	865.23	
Department of Mining and Metallurgy :		
Summer Course Mining Camp gift,	95.67	28,674.87
Dean's Office :		
Salary,	\$2,500.00	
Services and wages,	907.75	
Equipment and supplies,	129.83	
Stationery, postage, telephone and telegraph,	160.24	
Printing,	37.40	
Sundries,	39.15	3,774.36
Amount carried forward,		\$41,672.55

GRADUATE SCHOOL OF APPLIED SCIENCE (CONTINUED)

EXPENDITURE

Amount brought forward,		\$41,672.55	
From Appropriations:			
Architecture,	\$798.96		
Landscape Architecture,	1,950.86		
Engineering,	26,794.29		
Forestry,	270.77		
Mining and Metallurgy,	1,801.38		31,616.26
From Laboratory Fees:			
Engineering,	\$1,093.50		
Forestry,	95.00		
Mining and Metallurgy,	2,282.24		3,470.74
General.			
Salaries for Instruction:			
Edward Austin (part):			
Austin Teaching Fellowships, \$1,500.00			
From Sundry Funds and Gifts,	27,688.38		
From General Income,	88,869.32	\$118,057.70	
Services and wages,	537.10		
Equipment and supplies,	2.93		
Stationery and postage,	42.48		
Printing,	1,226.60		
Travelling expenses,	500.00		
Shop-work courses,	1,161.30		
Taxes Harvard Forest,	2,955.29		
Advertising,	50.00		
Diplomas,	24.91		
Sundries,	60.30		
Repairs and Equipment, Pierce Hall and Rotch			
Building,	3,830.82		
Caretaking, Pierce Hall and Rotch Building,	6,602.01		134,551.44
University charge.			
President's Office, salaries and expenses,	\$322.33		
Treasurer's Office, care of investments,	1,194.04		
Bursar's Office, collections and payments,	1,204.83		
Publication Office, salary and expenses,	118.46		
Inspector of Grounds and Buildings, salary and			
expenses,	407.51		
Medical adviser, salary and expenses,	99.78		
Quinquennial Catalogue,	21.08		
Annual Catalogue,	146.71		
Watchmen,	167.97		
Engineer,	30.89		
Labor, etc.,	3.34		3,716.94
Amount carried forward,		\$215,027.93	

GRADUATE SCHOOL OF APPLIED SCIENCE (CONTINUED)**EXPENDITURE**

Amount brought forward,			\$215,027.98
Phillips Brooks House, Schedule 29,	\$53.72		
Hemenway Gymnasium, Schedule 30,	348.08	401.80	
			<u>\$215,429.78</u>
General Surplus, made up as follows:			
Restricted Income unused, carried to			
Funds and Gifts,	\$28,295.06		
General Suspense,	625.54		
Surplus carried to General Suspense.			
Unexpended balances, \$8,854.52			
Reserve,	2,045.60	10,900.12	\$34,820.72
Less advances carried to General Suspense, . . .	2,662.39	32,158.88	
			<u><u>\$247,588.06</u></u>

SCHEDULE 12**GRADUATE SCHOOL OF BUSINESS ADMINISTRATION****INCOME AND EXPENDITURE**

For the year ended June 30, 1911

INCOME

Graduate School of Business Administration Balance (interest), .		\$361.04
Gifts for immediate use.		
Under the guarantee,	\$26,750.00	
Other Gifts:		
For general use,	550.00	
For loans—interest,	20.00	
Gift of Daniel W. Field, Equipment of reading room,	500.00	
Gift of Andrew W. Preston, South Amer- ican Course,	3,338.88	
Gift of Warren D. Robbins, South Amer- ican Course,	100.00	
Gift of Joseph E. Sterrett, books on accounting,	100.00	31,353.88
Receipts from students.		
Tuition fees,	\$8,625.00	
Graduation fees,	180.00	
Rental stop watches,	27.00	8,832.00
		<u><u>\$40,546.87</u></u>

GRADUATE SCHOOL OF BUSINESS (CONTINUED)

EXPENDITURE

From Gifts for Loans,	\$290.00	
From George O. May Gift for Prizes,	300.00	
From Joseph E. Sterrett Gift for Books,	15.90	
From Shaw Fund for Business Research,	150.00	\$755.90
Dean's Office.		
Salary,	\$500.00	
Services and wages,	923.63	
Expenses,	443.48	1,867.10
General.		
Salaries,	\$32,595.00	
Services and wages,	303.00	
Outside lecturers,	5,288.63	
Books,	1,499.60	
Expenses of course in Technique of Printing,	1,425.00	
Equipment and supplies,	286.39	
Stationery, postage, telephone and telegraph,	43.49	
Printing,	207.25	
Hospitality and travelling expenses,	472.44	
Scholarships from unrestricted income,	450.00	
Fitting up library in Lawrence Hall,	1,164.32	
Study Tours,	160.88	
Diplomas,	6.60	
Sundries,	96.26	33,998.75
University charge:		
President's Office, salaries and expenses,	\$192.98	
Bursar's Office, collections and payments,	342.88	
Medical Adviser, salary and expenses,	59.87	
Publication Office, salary and expenses,	236.91	
Annual Catalogue,	75.47	907.61
Phillips Brooks House, Schedule 29,	\$32.23	
Hemenway Gymnasium, Schedule 30,	209.28	241.51
		\$37,770.87
Reserve, carried to General Suspense, for use after the expiration of the guarantee,	\$3,311.40	
Less principal of Sundry gifts used,	\$285.90	
Advances to Sundry gifts carried to General Suspense,	250.00	535.90
		2,775.50
		<u>\$40,546.37</u>

SCHEDULE 13

**DIVINITY SCHOOL
INCOME AND EXPENDITURE**

For the year ended June 30, 1911

INCOME

Income of Funds for Instruction or for General Purposes.

Divinity School balance (interest),	\$780.56	
Endowment,	3,464.21	
Oliver Ames,	824.50	
Hannah C. Andrews,	25.46	
Daniel Austin,	54.08	
Adams Ayer,	48.50	
Joseph Baker,	740.84	
Beneficiary money returned (balance),	11.69	
Bussey Professorship,	1,822.83	
Bussey Trust (part),	5,246.34	
Joshua Clapp,	105.63	
Edwin Conant,	215.05	
Dexter Lectureship,	1,238.88	
Frothingham Professorship,	2,735.85	
Abraham W. Fuller,	50.92	
Lewis Gould,	44.18	
John Hancock Professorship,	\$391.39	
Charles L. Hancock (part),	308.61	600.00
Haven,	242.50	
Samuel Hoar,	50.98	
Hollis Professorship of Divinity,	1,674.12	
Henry P. Kidder,	485.00	
Henry Lienow,	445.47	
Caroline Merriam,	50.92	
John Newgate,	16.15	
Parkman Professorship,	776.78	
John W. Quinby,	38.18	
Abby Crocker Richmond,	48.50	
John L. Russell,	48.50	
William B. Spooner,	485.00	
Thomas Tileston of New York Endowment,	1,940.00	
Mary P. Townsend,	254.63	
Winthrop Ward,	101.85	
Winn Professorship,	2,829.78	
Augustus Woodbury Bequest,	50.34	
Society for Promoting Theological Education Gift, Library,	714.27	\$28,247.38

Income of Scholarship, Beneficiary and Prize Funds.

Robert Charles Billings (prizes),	\$128.57
Abner W. Buttrick,	659.50
Thomas Cary,	283.58

Amounts carried forward, \$1,071.65 \$28,247.38

DIVINITY SCHOOL (CONTINUED)

INCOME

Amounts brought forward,	\$1,071.65	\$28,247.38
Income of Scholarship, Beneficiary and Prize Funds (continued).		
George Chapman,	142.85	
Joshua Clapp,	237.76	
Jackson Foundation,	750.30	
J. Henry Kendall,	286.68	
Nancy Kendall,	174.44	
William Pomroy,	50.92	2,704.10
Income of Funds and Gifts.		
Rushton Dashwood Burr,	\$208.36	
Louisa J. Hall,	46.90	
Horace S. Sears Gift, Lectures,	1,700.00	1,955.26
Receipts from Students.		
Tuition fees, regular courses,	\$5,679.58	
Divinity Hall, rents,	8,010.00	
Library fines,	10.35	8,699.88
Summer School of Theology, Tuition fees,	\$629.50	
Sale Dr. Everett's books,	8.00	
" General Catalogue,	85.00	
" Alumni Dinner Tickets,	102.00	824.50
		<u>\$42,431.12</u>

EXPENDITURE

From Scholarship Funds.		
Thomas Cary,	\$350.00	
George Chapman,	125.00	
Joshua Clapp,	200.00	
Jackson Foundation,	640.00	
J. Henry Kendall,	250.00	
Nancy Kendall,	150.00	\$1,615.00
From Beneficiary Funds.		
Abner W. Buttrick,	\$575.00	
William Pomroy,	42.00	617.00
From Robert Charles Billings Fund, prize,		100.00
From Funds and Gifts.		
Rushton Dashwood Burr,	\$154.84	
Louisa J. Hall,	34.29	
Horace S. Sears Gift for Lectures,	500.00	689.13
Dean's Office.		
Stationery, postage, telephone and telegraph,	\$49.26	
Printing,	29.08	
Sundries,	2.25	80.59
Amount carried forward,		\$3,101.72

DIVINITY SCHOOL (CONTINUED)

EXPENDITURE

Amount brought forward,		\$8,101.72
General.		
Salaries,	\$24,520.00	
Services and wages,	1,820.87	
Equipment and supplies,	67.84	
Stationery, postage, telephone and telegraph, . . .	97.59	
Books,	381.25	
Advertising,	427.08	
Care of grounds,	120.00	
Printing,	618.85	
Summer School of Theology,	1,076.07	
Alumni Dinner,	78.00	
Lectures, President Harada,	100.00	
Contribution American School of Archaeology, . .	100.00	
Binding,	48.20	
Sundries,	5.48	29,461.23
Divinity Library.		
Repairs and equipment, land and building,	\$57.11	
Caretaking, land and building,	1,084.70	1,141.81
Divinity Hall.		
Repairs and equipment, land and building,	\$378.21	
Caretaking, land and building,	1,960.98	2,339.19
University charge.		
President's Office, salaries and expenses,	\$99.77	
Treasurer's Office, care of investments,	519.85	
Bursar's Office, collections and payments,	264.08	
Medical Adviser, salary and expenses,	31.01	
Inspector of Grounds and Buildings, salary and expenses,	138.65	
Publication Office, salary and expenses,	14.81	
Quinquennial Catalogue,	73.79	
Annual Catalogue,	150.90	
Labor, etc.,	360.93	
Watchmen,	54.92	
Engineer,	50.17	
Janitor,	92.91	1,846.74
Semitic Museum, Schedule 25,	\$414.39	
Phillips Brooks House, Schedule 29,	16.69	
Hemenway Gymnasium, Schedule 30,	107.35	538.43
		\$38,429.12
General Surplus, made up as follows :		
Restricted Income unused, added to Funds and Gifts,	\$2,688.05	
Surplus, carried to General Suspense,	1,318.95	4,002.00
		\$42,431.12

LAW SCHOOL
INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of Funds and Gifts.

Law School balance (interest),	\$2,751.16	
Ames Fund,	489.41	
James Barr Ames Loan.		
Interest,	\$31.91	
Repayments,	720.41	752.32
James Barr Ames Prize,		213.89
Gift of James Munson Barnard and Augusta		
Barnard (interest),	43.46	
Bemis Professorship,	4,557.98	
Bussey Professorship,	1,163.03	
Bussey Trust (part),	5,246.32	
James C. Carter Professorship,	5,396.01	
James Coolidge Carter Loan:		
Interest,	\$633.07	
Repayments,	86.39	719.46
Dane Professorship,		763.88
Samuel Phillips Prescott Fay 1798 Fund		
and Scholarship,		282.32
George Fisher Scholarship,		185.08
Hughes Loan.		
Repayments,		265.61
Langdell Scholarship,		1,269.15
Law School Book,		2,290.52
Law School Library,		4,850.00
Harry Milton Levy Loan:		
Interest,	\$126.34	
Repayments,	396.04	522.38
Royall Professorship,		404.54
Weld "		4,607.26
Scholarship Money Returned:		
Gift,	\$250.00	
Interest,	66.25	
Repayments,	1,226.88	1,543.08
Princeton Fellowship,		450.00
James A. Rumrill Scholarship,		225.00
Research Scholarship (gift),		250.00
Gift for Prizes.		
Joshua Montgomery Sears, Jr. Memorial:		
Gift,	\$1,500.00	
Interest,	90.11	1,590.11
Tuition fees,		119,525.00
Sale of Quinquennial Catalogue,		11.50
Amount carried forward,		\$160,358.42

LAW SCHOOL (CONTINUED)

INCOME

Amount brought forward,	\$160,858.42
Sale of Library Catalogue,	55.00
Unclaimed locker deposits,	38.00
Fees for duplicate diplomas,	5.00
Amount collected on account of unpaid term-bills previously charged off,	59.52
	<u>\$160,515.94</u>

EXPENDITURE

From Funds and Gifts.

James Barr Ames Prize,	\$400.00	
Samuel Phillips Prescott Fay,	929.08	
George Fisher Scholarship,	150.00	
Langdell Scholarship,	1,150.00	
Harry Milton Levy Loan,	2,715.25	
Princeton Fellowship,	450.00	
James A. Rumrill Scholarship,	225.00	
Scholarship Money Returned Loan,	1,610.00	
Joshua M. Sears, Jr. Prize,	1,500.00	\$9,129.28

Dean's and Secretary's Offices.

Salaries,	\$3,500.00	
Services and wages,	828.58	
Stationery, postage, telephone and telegraph, . . .	321.49	
Printing,	178.29	
Equipment and supplies,	162.51	
Sundries,	5.11	3,995.98

Scholarships from unrestricted income, 5,700.00

General.

Salaries,	\$68,720.00	
Services and wages,	8,591.76	
Equipment and supplies,	674.47	
Stationery, postage, telephone and telegraph, . . .	289.05	
Printing,	3,043.56	
Books,	21,139.51	
Binding,	2,192.46	
Advertising,	145.00	
Proctors,	728.00	
Freight,	351.16	
Travelling expenses,	194.30	
Diplomas,	257.99	
Diploma plate,	125.00	
Claim for injuries and legal expenses thereof, . . .	1,090.85	
Sundries,	91.18	107,634.29

Repairs and equipment, land and buildings, 2,193.27

Caretaking, land and buildings, 8,033.81

Amount carried forward, \$136,686.63

LAW SCHOOL (CONTINUED)**EXPENDITURE**Amount brought forward, **\$136,686.63****University charge.**

President's Office, salaries and expenses,	\$3,152.15	
Treasurer's Office, care of investments,	555.00	
Bursar's Office, collections and payments,	2,580.24	
Medical Adviser, salary and expenses,	667.16	
Inspector of Grounds and Buildings, salary and expenses,	486.84	
Publication Office, salary and expenses,	7.40	
Quinquennial Catalogue,	426.94	
Annual Catalogue,	264.06	
Labor, etc.,	289.69	
Watchmen,	200.28	
Janitor,	296.95	
Engineer,	160.25	8,086.96

Phillips Brooks House, Schedule 29, \$359.19**Hemenway Gymnasium, Schedule 30, 2,330.31 2,689.50****\$147,463.09****General Surplus, made up as follows :**

Restricted Income unused, added to Funds and Gifts,	\$3,625.93	
Surplus, carried to General Suspense,	9,426.92	13,052.85
		\$160,515.94

SCHEDULE 15**MEDICAL SCHOOL****INCOME AND EXPENDITURE**

For the year ended June 30, 1911

INCOME**Income of Funds for Instruction and General Purposes.**

Anonymous Fund in the Department of Theory and Practice,	\$502.65
Edward M. Barringer (part),	968.19
Robert C. Billings,	4,850.00
John B. and Buckminster Brown,	1,204.11
Bullard Professorship of Neuropathology,	3,691.63
John C. Cutter Bequest,	255.55
Calvin and Lucy Ellis (part),	17,528.80
Samuel E. Fitz,	89.05
Rebecca A. Greene Bequest,	15.96
Henry Harris ($\frac{1}{2}$ income),	726.02

Amount carried forward, **\$29,831.96**

MEDICAL SCHOOL (CONTINUED)

INCOME

Amount brought forward, \$29,881.96

Income of Funds for Instruction and General Purposes
(continued).

Harvard Medical Alumni,	274.07	
Hersey Professorship ($\frac{1}{2}$ income),	892.21	
George Higginson,	5,110.40	
John Homans Memorial,	2,533.64	
Jackson Professorship of Clinical Medicine, . .	3,355.86	
Hamilton Kuhn Memorial,	9,138.08	
William O. Moseley,	2,578.02	
New subscription,	1,884.23	
Lyman Nichols,	485.97	
George F. Parkman, Medical Fund,	416.18	
Henry L. Pierce (Residuary):		
Sale of land,	\$1,144.53	
Interest,	1,894.31	3,038.83
John D. Rockefeller,	48,500.00	
Dr. Ruppner,	452.80	
George C. Shattuck,	3,640.45	
James Stillman Professorship,	5,688.28	
Mary W. Swett,	764.60	
Samuel W. Swett,	970.00	
Quincy Tufts,	97.00	
Henry Willard Williams,	2,282.12	
Gifts for salaries,	6,300.00	
Gift toward cost new animal house,	800.00	\$128,524.70

Income of Fellowship Funds.

Austin Teaching Fellowships,	\$2,500.00	
Charles Follen Folsom Memorial,	643.11	
George Cheyne Shattuck Memorial,	270.78	
Frederick Sheldon,	1,335.18	
Charles Eliot Ware Memorial,	290.90	
John Ware "	267.91	
Henry P. Walcott,	1,060.99	6,868.82

Income of Funds and Gifts for Scholarships and Aids.

Anonymous Gift for Loans,	\$150.00	
Edward M. Barringer (part),	500.00	
Lucius F. Billings,	263.35	
James Jackson Cabot,	306.47	
David Williams Cheever,	288.58	
Cotting Gift (interest),	161.55	
Orlando W. Doe,	148.12	
Joseph Eveleth (part),	600.00	
John Foster,	153.79	
Lewis and Harriet Hayden,	283.63	

Amounts carried forward, \$2,855.49 \$134,893.52

MEDICAL SCHOOL (CONTINUED)

INCOME

Amounts brought forward,	\$2,855.49	\$134,893.52
Income of Funds and Gifts for Scholarships and Aids		
<i>(continued).</i>		
William Hilton (part),	450.00	
William Otis Johnson,	26.29	
Claudius M. Jones,	329.85	
John R. Kissenger,	18.33	
Alfred Hosmer Linder,	277.47	
Loan Fund Medical School Class of 1879 (Gift),	70.00	
James Ewing Mears (Gift),	225.00	
Joseph Pearson Oliver,	440.04	
Charles B. Porter,	287.94	
Francis Skinner,	260.30	
Charles Pratt Strong,	260.74	
Isaac Sweetser,	331.64	
John Thomson Taylor,	271.75	
Edward Wigglesworth,	278.73	6,383.57
Income of Prize Funds.		
Ward Nicholas Boylston,	\$220.92	
William H. Thorndike,	457.16	678.08
Income of Sundry Funds and Gifts for Special Purposes.		
Frederick M. Allen Gift, Preventive Medicine,	\$787.50	
Anatomical Research Gift,	500.00	
Edward Austin (Bacteriological Laboratory),	548.20	
J. Ingersoll Bowditch,	319.81	
Boylston, for Medical Books,	81.14	
Katherine E. Bullard Gift, Neuropathology,	1,200.00	
Gift for a salary, Cancer Commission,	450.00	
Memorial Cancer Hospital Endowment,	1,195.86	
Memorial Cancer Hospital Maintenance,	298.67	
Caroline Brewer Croft (part):		
Gifts,	\$545.00	
Interest,	2,332.91	2,877.91
Sale Duplicate Books, Library,	191.46	
George Fabyan Foundation for Comparative Pathology:		
Interest,	\$10,006.71	
Sales,	161.65	10,168.36
George Fayban Foundation, Special,	454.44	
Charles F. Farrington,	2,548.82	
F. B. Greenough (for surgical research),	286.98	
Henry Jackson Endowment,	4,995.35	
Walter Augustus Lecompte Professorship of Otolaryngology,	2,504.30	
Amounts carried forward,	\$29,408.75	\$141,955.17

MEDICAL SCHOOL (CONTINUED)

INCOME

Amounts brought forward, \$29,403.75 \$141,955.17

Income of Sundry Funds and Gifts for Special Purposes
(continued).

Harriet Newell Lowell:

Gift,	\$2,000.00	
Interest,	82.40	2,082.40

Massachusetts Society for Promoting Agriculture

Gift, Comparative Pathology,	1,200.00
Medical Library,	112.71
Gift for Microscopes, etc.,	807.20

Gift for Investigation of Infantile Paralysis:

Gift,	\$3,975.00	
Interest,	111.98	4,086.98

Repayment Pathological Laboratory:

Gift,	\$1,775.00	
Interest,	84.15	1,859.15

Gift for Pathological Laboratory (interest),	293.28
--	--------

John C. Phillips Gift, Pathological

Department. Gift,	\$3,000.00	
Interest,	79.44	3,079.44

Proctor, for the study of Chronic Diseases, . . .	2,634.28
--	-----------------

Gift for Recreation Grounds,	950.00
--	--------

Henry Francis Sears Fund for Pathology, . .	1,718.12
--	-----------------

School of Comparative Medicine,	311.32
---	--------

Storey Putnam Gift, Neuropathology,	1,400.00
--	-----------------

Surgical Laboratory:

Gifts,	\$1,105.20	
Interest,	263.11	1,368.31

X-ray Apparatus (interest),	38.28
---------------------------------------	-------

Warren Fund for Anatomical Museum,	520.60
---	---------------

Edward Wigglesworth Professorship of Dermatology,	2,510.46	54,371.28
--	-----------------	------------------

Sale of heat and power,	\$3,522.74	
-----------------------------------	------------	--

Clinic fees,	160.00	3,682.74
------------------------	--------	----------

Receipts from students.**Tuition Fees.**

Regular courses,	\$54,086.43	
Graduate courses,	4,045.88	
Dental students,	7,400.00	
Summer courses,	8,380.35	
Division of Medical Sciences,	480.00	
Special students,	288.00	\$74,680.66
Graduation fees,	60.00	
Matriculation fees,	435.00	

Amounts carried forward, \$75,175.66 \$200,009.19

MEDICAL SCHOOL (CONTINUED)

INCOME

Amounts brought forward,	\$75,175.66	\$200,009.19
Receipts from students (<i>continued</i>).		
Examination fees,	117.00	
Laboratory fees and supplies.		
Anatomy,	\$985.00	
Comparative Anatomy,	53.75	
Chemistry,	1,094.58	
Clinical Laboratory,	99.18	
Histology,	357.25	
Physiology,	530.66	
Operative Surgery,	246.00	
Surgical Technique,	171.00	3,487.43
Use of microscopes,	1,113.50	
Fines,	12.50	79,906.08
		<u>\$279,915.27</u>

EXPENDITURE

From Fellowship Funds and Gifts.		
Charles Follen Folsom Memorial,	\$918.75	
George Cheyne Shattuck Memorial,	225.00	
Frederick Sheldon,	1,335.13	
Charles Eliot Ware Memorial,	250.00	
John Ware Memorial,	135.00	
Henry P. Walcott,	750.00	\$3,613.88
From Scholarship and Aid Funds and Gifts.		
Aesculapian Club,	\$150.00	
Anonymous Gift for Loans,	150.00	
Edward M. Barringer (part),	500.00	
Lucius F. Billings,	225.00	
James Jackson Cabot,	275.00	
David Williams Cheever,	250.00	
Cotting Gift,	125.00	
Orlando W. Doe,	100.00	
Joseph Eveleth (part),	600.00	
John Foster,	150.00	
Lewis and Harriet Hayden,	225.00	
William Hilton (part),	450.00	
Claudius M. Jones,	250.00	
Alfred Hosmer Linder,	250.00	
Loan Fund Medical School Class of 1879,	50.00	
James Ewing Mears,	225.00	
Joseph Pearson Oliver,	400.00	
Charles B. Porter,	250.00	
Francis Skinner,	150.00	
Charles Pratt Strong,	225.00	
Amounts carried forward,	\$5,000.00	\$3,613.88

MEDICAL SCHOOL (CONTINUED)

EXPENDITURE

Amounts brought forward	\$5,000.00	\$8,618.88
From Scholarship and Aid Funds and Gifts (<i>continued</i>).		
Isaac Sweetser,	250.00	
John Thomson Taylor,	250.00	
Edward Wigglesworth,	250.00	5,750.00
From Prize Funds.		
Boylston Prize expenses,	\$18.60	
William H. Thorndike,	200.00	218.60
From Sundry Funds and Gifts for Special Purposes.		
Frederick M. Allen Gift, Preventive Medicine,	\$787.50	
Anatomical Research Gifts,	412.08	
Edward Austin (Bacteriological Laboratory),	151.90	
Robert C. Billings, Journal of Medical Research,	300.00	
J. Ingersoll Bowditch, Physiology,	868.67	
Boylston, Medical Books,	79.49	
Mary L. Bremer Gift, Comparative Anatomy,	245.18	
Katherine E. Bullard Gift, Neuropathology,	1,124.78	
A. T. Cabot Gift,	6.20	
Gift for a salary, Cancer Commission,	250.00	
Caroline Brewer Croft (part):		
Cancer investigations,	\$5,820.49	
Less paid for salaries,	3,500.00	2,320.49
George Fabyan Foundation for Comparative Pathology,	\$8,551.73	
Less paid for salaries,	5,000.00	3,551.73
Gifts for the Investigation of Infantile Paralysis,		356.02
Henry Jackson Endowment:		
Warren Anatomical Museum,	\$5,254.24	
Less paid for salaries,	2,500.00	2,754.24
Walter Augustus Lecompte Professorship of Otology,	\$2,018.77	
Less paid for salaries,	1,700.00	318.77
Harriet Newell Lowell,		954.79
Massachusetts Society for Promoting Agriculture		
Gift, Comparative Pathology,	239.48	
Medical Library,	110.89	
Gift for Microscopes, etc.,	807.20	
Gift for Pathological Laboratory,	207.78	
Repayment Pathological Laboratory,	506.52	
John C. Phillips Gift, Pathological		
Department,	\$2,652.04	
Less amount paid for salaries,	2,513.71	138.33
Proctor, for the study of Chronic Diseases,	3,053.58	
Henry Francis Sears Fund for Pathology,	1,993.79	
Amounts carried forward,	\$21,538.86	\$9,577.48

MEDICAL SCHOOL (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$21,538.86	\$9,577.48
From Sundry Funds and Gifts for Special Purposes (continued).		
Storey Putnam Gifts, Neuropathology, \$1,418.81		
Less amount paid for salaries, 300.00	1,118.81	
Surgical Laboratory,	1,888.49	
Edward Wigglesworth Professorship of Dermatology, \$1,980.00		
Less paid for salaries, 1,500.00	480.00	
J. G. Wright Gift, Bacteriology,	86.75	
Gift for X-ray apparatus,	894.01	
Books, from proceeds of sale of duplicates,	188.56	25,689.98
Appropriations.		
Advertising and catalogues,	\$985.07	
Anatomy,	2,700.00	
Comparative Anatomy,	2,028.25	
Books and service for the library,	4,000.00	
Physiology,	1,928.10	
Comparative Physiology,	600.00	
Biological Chemistry,	2,503.69	
Bacteriology,	990.25	
Preventive Medicine and Hygiene,	2,061.09	
Materia Medica and Therapeutics,	998.78	
Theory and Practice of Physic,	1,884.72	
Clinical Medicine,	6.50	
Pediatrics,	149.58	
Surgery,	1,108.53	
Obstetrics,	50.00	
Neuropathology,	168.08	21,657.64
Dean's Office.		
Salaries,	\$1,500.00	
Services and wages,	2,100.00	
Equipment and supplies,	52.88	
Printing,	267.50	
Stationery, postage, telephone and telegraph, . . .	501.55	4,421.93
General.		
Salaries for instruction,	\$126,961.93	
Summer courses.		
Fees repaid to instructors,	8,087.36	
Graduate courses.		
Fees repaid to instructors,	4,085.00	
Services and wages,	10,419.01	
Equipment and supplies,	1,115.97	
Stationery, postage, telephone and telegraph, . . .	1,794.45	
Amounts carried forward,	\$152,463.72	\$61,847.03

MEDICAL SCHOOL (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$152,463.72	\$61,847.08
General (continued).		
Printing,	717.20	
Boston Medical Library,	800.00	
Diplomas,	97.84	
Travelling expense,	80.00	
Clinic,	1,949.18	
Proctors,	141.00	
Laying sidewalks,	217.00	
Printing and advertising for Summer courses, . . .	112.83	
Dues Association of Medical Colleges,	47.00	
Sundries,	42.43	
Repairs and equipment, land and buildings,	10,956.22	
Caretaking, land and buildings,	35,084.78	202,208.70
Retiring allowance,		1,000.00
Balance of payments on an annuity, Schedule 82, . . .		273.44
Interest on advances,		929.41
University charge.		
President's Office, salaries and expenses,	\$746.60	
Treasurer's Office, care of investments,	2,380.17	
Bursar's Office, collections and payments,	1,960.06	
Inspector of Grounds and Buildings, salary and expenses,	1,480.17	
Publication Office, salary and expenses,	7.40	
Quinquennial Catalogue,	363.68	
Annual Catalogue,	402.36	7,390.44
		<u>\$273,049.02</u>
General Surplus, made up as follows:		
Restricted Income unused added to		
Funds and Gifts,	\$16,765.87	
General Suspense, . . . . .	.19	
	<u>\$16,766.06</u>	
Less General Deficit carried to General Suspense:		
Advance to Gifts,	\$746.02	
Deficit for year,	9,153.79	9,899.81
		<u>6,866.25</u>
		<u><u>\$279,915.27</u></u>

DENTAL SCHOOL
INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of Funds and Gifts.

Dental School Endowment,	\$470.94	
Harvard Dental Alumni Endowment,	278.58	
Joseph Warren Smith Jr.,	498.00	
Henry C. Warren Endowment,	1,115.50	
Proctor Bequest,	24.25	\$3,387.27

Gifts for immediate use.

Dental School Research Fund,	\$100.00	
Harriet Newell Lowell Gift for Research,	2,000.00	2,100.00

Receipts from students.

Tuition fees, regular courses,	\$19,183.57	
Less transferred to Medical School,	7,400.00	\$11,783.57
Tuition fees, evening courses,	500.00	
Chemistry, breakage and supplies,	664.39	
Amount collected on account of unpaid term-bills previously charged off, . . . . .	.90	12,948.86

Fees from Infirmary,		8,944.63
--------------------------------	--	----------

Sale of gold,	\$458.72	
" merchandise,	320.56	779.28

General Deficit made up as follows:

Deficit carried to General Suspense,	\$9,341.94	
Less Restricted Income unused, added to Funds and Gifts,	1,091.00	8,250.94
		<u>\$35,410.98</u>

EXPENDITURE

From Funds and Gifts.

Harriet Newell Lowell (salaries),	\$1,000.00	
Gift for surgical instruments,	9.00	\$1,009.00

Dean's Office.

Salaries,	\$900.00	
Equipment and supplies,	69.60	
Stationery, postage, telephone and telegraph,	26.04	
Printing,	68.70	1,064.34

General.

Salaries for instruction,	\$7,950.00	
Salaries, evening courses,	465.50	
Services and wages,	4,546.42	
Equipment and supplies,	7,194.66	
Stationery, postage, telephone and telegraph,	489.86	
Printing,	1,398.66	
Advertising,	725.08	

Amounts carried forward,	\$32,770.13	\$3,073.34
------------------------------------	-------------	------------

DENTAL SCHOOL (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$22,770.18	\$2,078.84
General (continued).		
Binding Dental Journals,	11.25	
Mechanical Department sundries,	30.81	
Laundry,	581.29	
Quinquennial Catalogue,	5.50	
Diplomas,	26.88	
Rent of piano,	45.00	
Legal services,	30.00	
Laying sidewalk,	291.47	
Museum cases,	1,446.00	
Bronze tablet,	85.00	
Boston Medical Library,	50.00	
Dues to Dental Faculties Association of American Universities,	50.00	
Collation,	33.75	
Sundries,	38.50	25,495.08
Interest on advances,		83.63
Repairs and equipment, land and buildings,	\$1,007.24	
Caretaking, land and buildings,	5,778.50	6,785.74
University charge.		
President's Office, salaries and expenses,	\$311.37	
Treasurer's Office, care of investments,	35.64	
Bursar's Office, collections and payments,	350.28	
Inspector of Grounds and Buildings, salary and expenses,	104.40	
Publication Office, salary and expenses,	44.42	
Quinquennial Catalogue,	47.43	
Annual Catalogue,	79.65	978.19
		<u>\$35,410.98</u>

SCHEDULE 17

BUSSEY INSTITUTION

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of Funds.

Bussey Institution balance (interest),	\$601.21	
Bussey Trust (part),	10,492.67	\$11,093.88
Gifts for present use,		123.00
Sale of wood, hay, and sundries,	\$30.68	
Board of animals,	83.85	
Amounts carried forward,	\$104.08	\$11,216.88

BUSSEY INSTITUTION (CONTINUED)**INCOME**

Amounts brought forward,	\$104.03	\$11,216.88
Use of houses by College officers,	1,380.00	
Rent of Antitoxin stable,	1,008.82	
Sale of animals,	118.50	
Laboratory fees,	245.00	2,850.85
		<u>\$14,067.73</u>
Deficit, met by accumulated income, carried to General Suspense, .	7,067.81	
		<u><u>\$21,125.04</u></u>

EXPENDITURE

Salaries,	\$8,300.00	
Services and wages,	3,988.05	
Equipment and supplies,	4,391.15	
Stationery, postage, telephone and telegraph,	108.19	
Printing,	151.50	
Books,	502.41	
Legal services,	30.00	
Sundries,	111.15	
Repairs and equipment, land and buildings,	1,466.98	
Caretaking, land and buildings,	1,635.58	\$20,668.01
University charge.		
Treasurer's Office, care of investments,	\$187.13	
Bursar's Office, collections and payments,	175.11	
Inspector of Grounds and Buildings, salary and expenses,	94.79	457.03
		<u><u>\$21,125.04</u></u>

SCHEDULE 18**ARNOLD ARBORETUM****INCOME AND EXPENDITURE**

For the year ended June 30, 1911

INCOME**Income of Funds and Gifts.**

Arnold Arboretum,	\$6,285.80	
James Arnold,	7,875.67	
Arboretum Construction Gifts (interest),	1,730.09	
Robert Charles Billings (part),	662.25	
William L. Bradley Fund:		
Gift for present use,	\$600.00	
Interest,	970.00	1,570.00
Amount carried forward,	\$18,123.81	

ARNOLD ARBORETUM (CONTINUED)

INCOME

Amount brought forward,	\$18,123.81		
Income of Funds and Gifts (<i>continued</i>).			
Francis Skinner,	970.00		
Bussey, for the Arnold Arboretum,	111.94		
Sears gift for Library,	206.08	\$19,411.78	
For botanical exploration in China.			
Interest,	\$17.81		
Sale of photographs,	333.50		
Sale of botanical material,	3,342.85		
Gifts,	4,868.77	\$8,562.93	
Gifts for present uses,	22,625.00		
Gift for books:			
Gift,	\$8,000.00		
Interest,	9.79	8,009.79	34,197.72
Sale of publications,			75.00
			<u>\$53,684.50</u>

EXPENDITURE

From William L. Bradley Fund, bibliography (part),	\$1,570.00		
From Chinese Exploration Gifts.			
Exploration in Northern China,	\$2,920.00		
Third expedition,	4,766.71		
Carbon prints,	14.77	7,701.48	
From gift for books,		3,009.79	
From Sears Gift for Library,		1,321.83	
General.			
Salaries,	\$5,800.00		
Services and wages,	7,886.27		
Equipment and supplies,	3,883.30		
Stationery, postage, telephone and telegraph,	273.08		
Printing,	499.27		
Labor,	9,923.92		
Water, heat, light, power and protection,	1,862.40		
Repairs and equipment, land and buildings,	1,818.66		
Rent of building,	150.00		
Bradley Bibliography of Trees, services,	2,655.42		
Expenses of expeditions for collecting,	961.53		
Freight, express, etc.,	219.71		
Sundries,	84.00	35,517.51	
University charge.			
Treasurer's Office, care of investments,	\$261.89		
Bursar's Office, collections and payments,	182.16	443.55	
		<u>\$49,564.16</u>	
Surplus made up as follows:			
Added to Sundry Funds and Gifts,	\$139.48		
" " Arboretum Construction Gifts,	3,980.91	4,120.84	
		<u>\$53,684.50</u>	

SCHEDULE 19

**BOTANIC GARDEN
INCOME AND EXPENDITURE**

For the year ended June 30, 1911

INCOME

Income of Funds.

Botanic Garden balance (interest),	\$108.93	
Botanic Department ($\frac{1}{4}$ income),	1,305.83	
Lowell, for a Botanic Garden,	3,310.46	
John L. Russell ($\frac{1}{4}$ income),	24.25	\$4,649.47

Gifts.

For cases (interest),	\$14.91	
For sugar-cane investigation (interest),	15.71	
For immediate use,	8,012.00	8,042.62

Laboratory fees in Botany,	\$210.00	
Material supplied Radcliffe College,	100.00	
Sale of house and land,	3,000.00	3,310.00
		<u>\$16,002.09</u>

EXPENDITURE

Services and wages,	\$135.39	
Labor,	4,659.07	
Equipment and supplies,	785.11	
Stationery, postage, telephone and telegraph,	76.00	
Printing,	1.10	
Water, heat, light, power and protection,	1,019.48	
Repairs and equipment, land and buildings,	546.80	
Taxes,	157.30	
New greenhouses,	7,000.00	
Collecting plants and seeds,	250.00	
Books,	68.18	
Express and cartage,	44.96	
Sundries,	4.75	\$14,748.14

University charge.

Treasurer's Office, care of investments,	\$63.86	
Bursar's Office, collections and payments,	38.67	102.53
		<u>\$14,850.67</u>

General surplus, made up as follows:

Restricted Income unused, added to Funds and Gifts,	\$30.62	
Surplus, carried to General Suspense,	1,120.80	1,151.42
		<u>\$16,002.09</u>

SCHEDULE 20

BOTANICAL MUSEUM

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Gift for present use.

Gift for Botanical Museum,	\$3,050.00
--------------------------------------	------------

EXPENDITURE

Services and wages,	\$862.00	
Equipment and supplies,	811.06	
Telephone,	42.97	
Printing,	77.25	
Books,	76.41	
Repairs,	38.21	
Express,	2.00	\$1,409.90
University charge.		
Bursar's Office, collections and payments,	24.39	
		\$1,434.29
Surplus carried to General Suspense,		1,615.71
		<u>\$3,050.00</u>

SCHEDULE 21

GRAY HERBARIUM

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of Funds.

Gray Herbarium balance (interest),	\$328.83	
Robert Charles Billings,	727.50	
Asa Gray Memorial,	1,586.48	
Asa Gray Professorship of Systematic Botany, . .	1,040.87	
Herbarium,	1,001.82	
Sarah E. Potter Endowment,	9,198.96	
John L. Russell (1/3 income),	72.75	\$13,956.71
Asa Gray's copyrights,		857.06
Gifts for immediate use,		1,810.00
Sale of card index,	\$2,338.59	
" publications,	48.68	
" duplicate books and pamphlets,	25.00	2,407.27
		\$19,081.04
Deficit, met by accumulated income, carried to General Suspense, .		1,001.40
		<u>\$20,082.44</u>

GRAY HERBARIUM (CONTINUED)

EXPENDITURE

From Asa Gray Professorship of Systematic Botany Fund.

Salary of Asa Gray Professor (part),		\$1,040.37
Salaries,	\$5,730.45	
Services and wages,	2,869.70	
Equipment and supplies,	4,091.01	
Stationery, postage, telephone and telegraph,	70.09	
Printing,	975.11	
Books,	1,531.56	
Freight, express, and sundries,	52.15	
Expedition to Newfoundland,	426.62	
Commission and legal expenses on sale of Gray house,	166.27	
Amount paid Botanic Garden for removal of Gray house	2,000.00	
Repairs and equipment, land and buildings,	424.83	
Caretaking, land and buildings,	282.34	18,630.13
University charge.		
Treasurer's Office, care of investments,	\$300.48	
Bursar's Office, collections and payments,	132.26	
Inspector of Grounds and Buildings, salaries and expenses,	59.24	
Janitor,	42.58	
Engineer,	22.96	
	\$457.52	
Less overcharge in University charge of 1908-09,	85.58	371.94
		<u>\$20,032.44</u>

SCHEDULE 22

OBSERVATORY

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of Funds and Gifts.

Advancement of Astronomical Science (1901),	\$949.34
Advancement of Astronomical Science (1902),	923.50
Thomas G. Appleton,	242.50
J. Ingersoll Bowditch,	121.25
Uriah A. Boyden,	9,700.00
Charlotte Harris,	97.00
Haven,	2,182.50
James Hayward,	1,018.50
Observatory Endowment,	2,425.00
Paine Professorship,	2,425.00
Robert Treat Paine,	13,285.70

Amount carried forward, \$83,370.29

OBSERVATORY (CONTINUED)

INCOME

Amount brought forward,	\$33,370.29	
Income of Funds and Gifts (continued).		
Edward B. Phillips,	5,349.26	
Josiah Quincy,	832.79	
James Savage ($\frac{1}{4}$ net income),	434.25	
David Sears,	2,136.33	
Augustus Story,	648.98	\$42,771.85
Mrs. Henry Draper, gift for special research (addi- tional),	\$4,800.00	
J. Rayner Edmands Gift, Library.		
Gift,	\$1,000.00	
Interest,	14.21	1,014.21
Gifts for present use,	8,000.00	8,814.21
Use of house by College officer,	\$600.00	
Sale of Annals,	26.78	
“ photographs,	15.00	641.78
		<u>\$52,227.84</u>
General Deficit, made up as follows:		
Advance to Fund, carried to General Suspense, . .	\$562.57	
Balances of sundry accounts used,	6,116.41	
	<u>\$6,678.98</u>	
Less Restricted Income unused, added to Funds and Gifts,	2,605.88	4,073.10
		<u><u>\$56,800.94</u></u>

EXPENDITURE

From Advancement of Astronomical Science Fund (1901),	\$2,100.00	
From Advancement of Astronomical Science Fund (1902),	400.00	
From Uriah A. Boyden Fund.		
Salaries,	\$5,151.50	
Services and wages,	1,554.29	
Equipment and supplies,	540.62	
Books,	53.47	
Expedition to Peru,	2,200.00	
Interest on advances,	721.39	
Sundries,	41.80	10,262.57
From Draper Memorial.		
Salaries,	\$3,000.00	
Expedition to Peru,	1,800.00	4,800.00
From Josiah Quincy Fund,		
Salaries,	\$14,282.66	5,008.64
Services and wages,	11,852.75	
Equipment and supplies,	2,733.11	
Amounts carried forward,	\$28,868.52	\$22,571.21

OBSERVATORY (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$28,868.52	\$22,571.21
Stationery, postage, telephone and telegraph,	324.72	
Printing,	356.75	
Binding,	332.81	
Books,	408.65	
Repairs and equipment, land and buildings,	599.49	
Caretaking, land and buildings,	2,905.45	
Taxes,	130.65	
Expedition to South Africa,	292.20	
Printing Annals,	3,402.13	
Use of house,	90.00	
Freight,	164.02	
Sundries,	26.56	
	<u>\$37,901.95</u>	
Less cost printing certain Annals, transferred to the Josiah Quincy Fund,	5,008.64	\$2,892.31
University charge.		
Treasurer's Office, care of investments,	\$613.40	
Bursar's Office, collections and payments,	223.02	836.42
		<u>\$56,300.94</u>

SCHEDULE 23

MUSEUM OF COMPARATIVE ZOOLOGY

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of Funds.

Museum of Comparative Zoölogy balance (interest),	\$896.72	
Agassiz Memorial,	14,449.75	
Virginia Barret Gibbs Scholarship,	286.59	
Gray Fund for Zoölogical Museum,	2,425.00	
Sturgis Hooper,	5,210.86	
Humboldt,	375.44	
Willard Peele Hunnewell,	242.50	
Permanent Fund for Museum of Zoölogy,	5,697.25	
Henry L. Pierce, Residuary (part),	4,733.19	
Teachers' and Pupils',	368.31	
Maria Whitney,	300.72	
Alexander Agassiz Bequest, General Purposes,	2,397.97	
" " " Publications,	2,908.40	\$40,292.20

Amount carried forward, \$40,292.20

MUSEUM OF COMPARATIVE ZOÖLOGY (CONTINUED)

INCOME

Amount brought forward,		\$40,292.20	
Gift for present use,			500.00
Use of lecture rooms by Radcliffe College,	\$700.00		
Sale of publications,	456.61	1,156.61	
			<u>\$41,948.81</u>
General Deficit, made up as follows:			
Accumulated Income of Sturgis Hooper Fund,	\$289.64		
Principal of Alexander Agassiz Bequest for Publications,	6,712.94		
			<u>\$7,002.58</u>
Less Restricted Income unused, added to Funds and Gifts,	\$337.81		
Surplus carried to General Suspense,	337.91	675.22	6,327.86
			<u><u>\$48,276.17</u></u>

EXPENDITURE

From Sturgis Hooper Fund.			
Salary of Sturgis Hooper Professor,	\$5,500.00		
From Alexander Agassiz Bequest for Publications,	9,621.34		
From Virginia Barret Gibbs Scholarship Fund.			
Scholarship,	250.00	\$15,371.84	
Salaries,	\$8,000.01		
Services and wages,	6,820.00		
Equipment and supplies,	4,026.78		
Stationery, postage, telephone and telegraph,	248.31		
Printing,	3,140.36		
Books,	2,056.04		
Water, heat, light, power and protection,	6,774.11		
Repairs and equipment, land and buildings,	2,762.61		
Binding,	1,037.90		
Collections,	1,084.97		
Freight and cartage,	332.94		
Boarding and lodging of students at Bermuda Biological Station,	363.60		
Sundries,	58.50	36,651.08	
University charge.			
Treasurer's Office, care of investments,	\$585.16		
Bursar's Office, collections and payments,	145.01	730.17	
			<u>\$52,752.59</u>
Less the following items transferred:			
To the College, Schedule 8:			
Heating and service,	\$3,446.25		
Publishing contributions from the Laboratories of Geography and Zoölogy,	300.00		
			<u>\$3,746.25</u>
To the University, Schedule 7:			
Total University charge,	730.17	4,476.42	
			<u><u>\$48,276.17</u></u>

SCHEDULE 24

**PEABODY MUSEUM OF AMERICAN ARCHAEOLOGY
AND ETHNOLOGY**

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of Funds.

Hemenway Fellowship,	\$613.18	
Mary Hemenway Fund for Archaeology, . . .	2,182.50	
Peabody Building,	1,439.20	
Peabody Collection,	2,402.47	
Peabody Professor,	2,402.47	
Thaw Fellowship,	1,167.61	
Henry C. Warren Exploration,	485.00	
Susan Cornelia Warren,	242.50	
Robert C. Winthrop Scholarship,	294.15	
Huntington Frothingham Wolcott,	970.00	
Anonymous Fellowship in Central American Archaeology,	600.00	\$12,799.08
Gifts for present use,		7,121.00
Reimbursement by College for installation of boiler in 1909-10, . .		1,883.74
Returned by Dr. Farabee, South American Expedition account, .		56.54
		<u>\$21,860.36</u>

EXPENDITURE

Anonymous Fellowship in Central American Archaeology,	\$600.00	
Thaw Fellowship,	1,354.17	
Henry C. Warren Fund, explorations,	399.88	
Mary Hemenway Fund,	666.67	
Huntington Frothingham Wolcott Fund, specimens,	1,130.00	\$4,150.72
Services and wages,	\$4,054.94	
Equipment and supplies,	1,268.96	
Stationery, postage, telephone and telegraph,	253.08	
Printing,	28.95	
Books,	233.24	
Binding,	146.35	
Explorations,	363.15	
Collections,	5,500.00	
Professional services,	50.00	
Freight,	109.80	
Sundries,	58.96	
Repairs and equipment, land and buildings,	163.20	
Caretaking, land and buildings,	1,460.02	13,690.60
Interest on advances,		48.71
University charge.		
Treasurer's Office, care of investments,	\$179.70	
Bursar's Office, collections and payments,	107.88	
Amounts carried forward,	\$287.58	\$17,890.03

PEABODY MUSEUM (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$287.58	\$17,890.08
University charge (<i>continued</i>).		
Inspector of Grounds and Buildings, salary and expenses,	152.54	
Watchmen,	62.80	
Engineer,	58.89	
Janitor,	109.21	671.02
		<u>\$18,561.05</u>
Less amounts transferred.		
Repairs, land and buildings,	\$163.20	
Caretaking, land and buildings,	1,460.02	
University charge,	671.02	2,294.24
		<u>\$16,266.81</u>
The above amounts are transferred as follows:		
90% to University, Schedule 7,	\$3,064.82	
10% to College, Schedule 8,	229.42	
	<u>\$3,294.24</u>	
General Surplus, made up as follows:		
Restricted Income unused, added to Funds and Gifts,	\$2,246.60	
Amount carried to General Suspense to repay advance	75.12	
Surplus, carried to General Suspense,	3,481.83	
	<u>\$5,758.55</u>	
Less advance to Fund, carried to General Suspense,	160.00	5,598.55
		<u>\$21,860.36</u>

SCHEDULE 25

SEMITIC MUSEUM

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Gifts for Semitic Collection.		
Gift,	\$1,000.00	
Interest,	208.88	\$1,208.88
Gifts for excavations in Palestine.		
Interest,		182.50
Income from Charles L. Hancock Bequest,		500.00
		<u>\$1,886.38</u>
General Deficit, made up as follows:		
Deficit, met by unrestricted principal of Gifts for excavations in Palestine,	\$20,546.39	
Less Restricted Income unused, added to Funds and Gifts,	926.80	19,619.59
		<u>\$21,505.97</u>

SEMITIC MUSEUM (CONTINUED)

EXPENDITURE

From gifts for Semitic Collection,	\$277.08	
From gifts for excavations in Palestine,	<u>20,728.89</u>	\$21,005.97
Curator,		500.00
Repairs and equipment, land and building,	\$45.28	
Caretaking, land and building,	<u>1,085.89</u>	1,130.67
University charge.		
Treasurer's Office, care of investments,	\$10.38	
Bursar's Office, collections and payments,	33.84	
Inspector of Grounds and Buildings, salary and expenses,	82.20	
Watchmen,	33.90	
Engineer,	31.70	
Janitor,	<u>58.61</u>	250.63
		<u>\$22,887.27</u>
Less amounts transferred.		
General expenses,	\$1,180.67	
University charge,	<u>250.63</u>	1,381.30
		<u>\$21,505.97</u>
The above amounts are transferred as follows :		
70 % to University, Schedule 7,	\$966.91	
30 % to Divinity School, Schedule 13,	<u>414.39</u>	
		<u>\$1,381.30</u>

SCHEDULE 26

GERMANIC MUSEUM

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of Funds and Gifts.

Emperor William,	\$1,277.25	
Germanic Museum balance (interest),	27.40	
Germanic Museum,	485.68	
Germanic Museum Endowment,	<u>2,484.32</u>	\$4,274.65
Gift for special works of art,		1,000.00
Sale of Handbooks,		<u>23.04</u>
		<u>\$5,297.69</u>

EXPENDITURE

General.

Equipment and supplies,	\$113.43	
Printing,	5.41	
Stationery and postage,	<u>23.19</u>	
Amount carried forward,		\$142.03

GERMANIC MUSEUM (CONTINUED)

EXPENDITURE

Amount brought forward,	\$142.08	
General (continued).		
Sundries,	14.17	
Repairs and equipment, land and building,	24.40	
Caretaking, land and building,	915.85	\$1,095.95
University charge.		
Treasurer's Office, care of investments,	\$48.06	
Bursar's Office, collections and payments,	29.00	
Inspector of Grounds and Buildings, salary and expenses,	89.24	
Watchmen,	16.82	
Engineer,	15.27	142.89
		\$1,288.84
Less University charge transferred to University, Schedule 7, . . .		142.89
		\$1,095.95
General Surplus made up as follows:		
Restricted Income unexpended, added to Funds and Gifts,	\$3,484.32	
Surplus carried to General Suspense,	717.42	4,201.74
		\$5,297.69

SCHEDULE 27

WILLIAM HAYES FOGG ART MUSEUM

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of Funds.		
William Hayes Fogg,	\$2,425.00	
Gray Fund for Engravings,	780.27	
William M. Prichard,	723.23	
John Witt Randall,	1,471.44	
Mary R. Searle,	102.67	\$5,502.61
Sale of photographs and catalogues,	\$46.01	
For work in connection with photographs sold,	48.75	
Gifts for special exhibit,	128.98	
Gift for paintings,	200.00	418.74
		\$5,921.85
General Deficit, made up as follows:		
Accumulated income of Sundry Funds,	\$586.07	
Advance to Fund carried to General Suspense, . . .	78.97	
Deficit carried to General Suspense,	260.72	925.76
		\$6,847.11

WILLIAM HAYES FOGG ART MUSEUM (CONTINUED)

EXPENDITURE

From the following Funds:

Gray Fund for Engravings.

Curator,	\$250.00	
Services,	415.42	
Collections,	202.50	\$867.92

William M. Prichard, collections, 618.45

John Witt Randall.

Curator,	\$250.00	
Expenses,	1,590.08	1,840.08

Mary R. Searle, books, 416.20

From Gifts.

Paintings,	\$200.00	
Special Exhibit,	128.98	328.98

General.

Director,	\$500.00	
Services and wages,	1,509.30	
Equipment and supplies,	92.18	
Stationery, postage, telephone and telegraph,	20.12	
Printing,	8.80	
Professional services,	400.00	
Insurance,	131.75	
Repairs and equipment, building,	113.38	
Caretaking, building,	2,478.31	5,258.79

University charge

Treasurer's Office, care of investments,	\$83.16	
Bursar's Office, collections and payments,	91.20	
Inspector of Grounds and Buildings, salary and expenses,	121.43	
Engineer,	46.91	
Watchmen,	101.85	444.05

\$9,769.47

Less amounts transferred.

Caretaking, building,	\$2,478.31	
University charge,	444.05	2,922.36

\$6,847.11

The above amounts are transferred as follows:

10 % to University, Schedule 7,	\$292.24
90 % to College, Schedule 8,	2,630.12
	<u>\$2,922.36</u>

APPLETON CHAPEL

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME**Income of Funds.**

Fund for Religious Services,	\$50.15	
Increase Sumner Wheeler,	2,425.00	
Edward Wigglesworth Memorial,	7,275.00	\$9,750.15
Use of Organ,		33.19
		<u>\$9,783.34</u>

General deficit made up as follows :

Advance to Gift, carried to General Suspense, . .	\$182.09	
Deficit, transferred.		
20% to University, Schedule 7,	110.53	
80% to College, Schedule 8,	442.14	734.76
		<u><u>\$10,518.10</u></u>

EXPENDITURE

From George Wigglesworth gift, \$182.09

General.

Preaching and morning services,	\$3,975.00	
Administrator,	400.00	
Organist and Choir-master,	1,500.00	
Choir,	2,000.00	
Equipment and supplies,	101.42	
Stationery, postage, telephone and telegraph, . . .	1.07	
Printing,	71.15	
Repairs and equipment, land and buildings,	662.04	
Caretaking, land and buildings,	977.85	
Repairing and tuning organ,	91.21	
Music,	56.94	
Sundries,	115.65	9,952.33

University charge.

Treasurer's Office, care of investments,	\$188.09	
Bursar's Office, collections and payments,	60.88	
Inspector of Grounds and Buildings, salary and expenses,	62.95	
Watchmen,	52.40	
Janitor,	45.07	
Engineer,	24.29	383.68
		<u><u>\$10,518.10</u></u>

SCHEDULE 29

PHILLIPS BROOKS HOUSE

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of Funds.

Phillips Brooks House Endowment,	\$509.59	
John W. and Belinda L. Randall,	327.81	
Ralph H. Shepard,	550.18	
Ralph Hamilton Shepard Memorial,	276.74	\$1,664.32
		<u>\$1,664.32</u>

EXPENDITURE

Secretaries of Phillips Brooks House Association, . . .	\$1,000.00	
Equipment and supplies,	64.90	
Books,	2.90	
Receptions,	259.30	
Services of matron,	101.00	
Rent of piano,	45.00	
Sundries,	88.68	
Repairs and equipment, land and buildings,	84.99	
Caretaking, land and buildings,	1,541.44	\$3,188.21

University charge.

Treasurer's Office, care of investments,	\$32.27	
Bursar's Office, collections and payments,	57.58	
Inspector of Grounds and Buildings, salary and expenses,	44.43	
Watchmen,	36.96	
Engineer,	17.14	
Janitor,	31.80	210.18
		<u>\$3,398.39</u>

Less amounts transferred.

Repairs and equipment, land and buildings, . . .	\$84.99	
Caretaking, land and buildings,	1,541.44	
University charge,	210.18	1,836.61
		<u>\$1,561.78</u>

The above amounts are transferred as follows :

10% to University, Schedule 7,	\$183.66	
Remainder, divided in proportion to the number of students :		
College, Schedule 8,	1,191.12	
Graduate School of Applied Science, Schedule 11,	53.72	
Graduate School of Business Administration, Schedule 12,	32.33	
Amounts carried forward,	\$1,460.78	\$1,561.78

PHILLIPS BROOKS HOUSE (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$1,480.78	\$1,561.78
Amounts transferred (<i>continued</i>).		
Divinity School, Schedule 18,	16.69	
Law School, Schedule 14,	859.19	
	<u>\$1,886.61</u>	
General surplus made up as follows:		
Restricted Income unused, added to Funds and Gifts,	\$327.81	
Less deficit met by the accrued income of the Ralph Hamilton Shepard Memorial Fund,	225.27	102.54
		<u>\$1,664.32</u>

SCHEDULE 30

HEMENWAY GYMNASIUM

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Fees for the use of		
Lockers, by students,	\$1,848.50	
Gymnasium, by graduates,	10.00	\$1,858.50
Deficit transferred to the following departments in proportion to the number of students.		
College, Schedule 8,	\$7,726.14	
Graduate School of Applied Science, Schedule 11,	848.08	
Graduate School of Business Administration, Schedule 12,	209.28	
Divinity School, Schedule 18,	107.35	
Law School, Schedule 14,	2,330.31	
Episcopal Theological School,	122.54	10,848.70
		<u>\$12,697.20</u>

EXPENDITURE

Salaries,	\$5,500.00	
Services and wages,	1,147.19	
Apparatus,	548.38	
Equipment and supplies,	11.70	
Stationery, postage, telephone and telegraph,	91.16	
Printing,	78.70	
Rent of piano,	24.00	
Repairs and equipment, land and building,	511.95	
Caretaking, land and building,	4,271.07	\$12,179.15
Amount carried forward,		\$12,179.15

SCHEDULE 29

PHILLIPS BROOKS HOUSE

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Income of Funds.

Phillips Brooks House Endowment,	\$509.59	
John W. and Belinda L. Randall,	327.81	
Ralph H. Shepard,	550.18	
Ralph Hamilton Shepard Memorial,	276.74	\$1,664.32
		<u>\$1,664.32</u>

EXPENDITURE

Secretaries of Phillips Brooks House Association, . . .	\$1,000.00	
Equipment and supplies,	64.90	
Books,	2.90	
Receptions,	259.30	
Services of matron,	101.00	
Rent of piano,	45.00	
Sundries,	88.68	
Repairs and equipment, land and buildings,	84.99	
Caretaking, land and buildings,	1,541.44	\$3,188.21

University charge.

Treasurer's Office, care of investments,	\$32.37	
Bursar's Office, collections and payments,	57.58	
Inspector of Grounds and Buildings, salary and expenses,	44.48	
Watchmen,	36.96	
Engineer,	17.14	
Janitor,	31.80	210.18
		<u>\$3,398.39</u>

Less amounts transferred.

Repairs and equipment, land and buildings,	\$84.99	
Caretaking, land and buildings,	1,541.44	
University charge,	210.18	1,836.61
		<u>\$1,561.78</u>

The above amounts are transferred as follows :

10% to University, Schedule 7,	\$183.66	
Remainder, divided in proportion to the number of students :		
College, Schedule 8,	1,191.12	
Graduate School of Applied Science, Schedule 11,	53.72	
Graduate School of Business Administration, Schedule 12,	32.33	
Amounts carried forward,	\$1,460.78	\$1,561.78

PHILLIPS BROOKS HOUSE (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$1,460.78	\$1,561.78
Amounts transferred (<i>continued</i>).		
Divinity School, Schedule 18,	16.69	
Law School, Schedule 14,	359.19	
	<u>\$1,836.61</u>	
General surplus made up as follows:		
Restricted Income unused, added to Funds and Gifts,	\$327.81	
Less deficit met by the accrued income of the Ralph Hamilton Shepard Memorial Fund,	225.27	102.54
		<u>\$1,664.32</u>

SCHEDULE 30

HEMENWAY GYMNASIUM

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Fees for the use of		
Lockers, by students,	\$1,848.50	
Gymnasium, by graduates,	10.00	\$1,858.50
Deficit transferred to the following departments in pro- portion to the number of students.		
College, Schedule 8,	\$7,726.14	
Graduate School of Applied Science, Schedule 11,	348.08	
Graduate School of Business Administration, Schedule 12,	209.28	
Divinity School, Schedule 13,	107.35	
Law School, Schedule 14,	2,380.31	
Episcopal Theological School,	122.54	10,843.70
		<u>\$12,697.20</u>

EXPENDITURE

Salaries,	\$5,500.00	
Services and wages,	1,147.19	
Apparatus,	548.88	
Equipment and supplies,	11.70	
Stationery, postage, telephone and telegraph,	91.16	
Printing,	78.70	
Rent of piano,	24.00	
Repairs and equipment, land and building,	511.95	
Caretaking, land and building,	4,271.07	\$12,179.15
Amount carried forward,		<u>\$12,179.15</u>

HEMENWAY GYMNASIUM (CONTINUED)**EXPENDITURE**

Amount brought forward,		\$12,179.15
University charge.		
Bursar's Office, collections and payments,	\$90.54	
Inspector of Grounds and Buildings, salary and expenses,	237.69	
Watchmen,	97.98	
Engineer,	91.84	518.05
		<u>\$12,697.30</u>

SCHEDULE 31**STILLMAN INFIRMARY****INCOME AND EXPENDITURE**

For the year ended June 30, 1911

INCOME**Income of Funds and Gifts.**

Robert Charles Billings, for Stillman Infirmary,	\$2,936.97	
Free Bed Fund of the Class of 1868,	309.28	
" " for the Stillman Infirmary,	31.67	
Herbert Schurz Memorial Free Bed Fund,	176.20	
Stillman Infirmary Gift, interest,	374.80	
Henry P. Walcott,	155.39	\$3,984.31

Receipts from Students.

Infirmary annual fees,	\$14,604.00	
Receipts from patients,	4,496.78	19,100.78
		<u>\$23,085.09</u>

EXPENDITURE

Services and wages,	\$8,486.72	
Equipment and supplies,	7,241.27	
Stationery, postage, telephone and telegraph,	258.65	
Printing,	28.15	
Sundries,	20.80	
Repairs and equipment, land and buildings,	416.86	
Caretaking, land and buildings,	5,367.88	\$21,820.33
Interest on advances,		19.04
University charge.		
Treasurer's Office, care of investments,	\$56.43	
Bursar's Office, collections and payments,	136.01	
Medical Adviser, salary and expenses,	750.00	
Amounts carried forward,	\$942.44	\$21,839.37

STILLMAN INFIRMARY (CONTINUED)

EXPENDITURE

Amounts brought forward,	\$942.44	\$21,839.37
University charge (<i>continued</i>).		
Inspector of Grounds and Buildings, salary and expenses,	113.28	
Labor, etc.,	113.10	
Engineer,	43.60	1,212.42
		<u>\$23,051.79</u>
General Surplus, made up as follows:		
Restricted Income unused, added to Funds and Gifts,	\$374.80	/
Less Deficit carried to General Suspense,	341.50	33.30
		<u>\$23,065.09</u>

SCHEDULE 32

FUNDS AND GIFTS FOR SPECIAL PURPOSES

INCOME AND EXPENDITURE

For the year ended June 30, 1911

INCOME

Anonymous Fund,	\$3,545.57	
Anonymous Gift for Gray Herbarium library building.		
Gift,	\$10,000.00	
Interest,	74.80	10,074.80
Francis H. Burr Memorial Gift.		
Gift,	\$25,000.00	
Interest,	827.16	25,827.16
Gifts for Arnold Arboretum Building.		
Interest,		510.51
Bussey Trust (part),		9,336.56
Gift from the Carnegie Foundation,		37,971.69
Class of 1834 Fund,		77.92
" 1842 "		5.38
" 1844 "		447.10
" 1846 "		663.67
" 1853 "		153.66
" 1856 "		363.75
Caroline Brewer Croft (part),		2,290.50
Dr. John C. Cutter Bequest (part),		409.72
Gifts for Dental School Building,		275.00
Paul Dudley Fund,		198.90
Calvin and Lucy Ellis Fund (part),		155.55
Amount carried forward,		<u>\$92,307.44</u>

FUNDS AND GIFTS, ETC. (CONTINUED)

INCOME

Amount brought forward,		\$92,307.44
Gift for Freshman Dormitories.		
Gifts,	\$32,454.00	
Interest,	133.89	32,587.89
Germanic Museum Building.		
Gift,	\$100,000.00	
Interest,	6,887.71	106,887.71
Wolcott Gibbs Memorial.		
Gifts,	\$7,095.00	
Interest,	4,729.67	11,824.67
Godkin Lecture Fund,		728.18
Charles Gross Memorial Fund (part),		1.06
Gurney Fund (part),		500.00
Harvard Memorial Society (interest),		84.68
Charles L. Hancock Bequest,		15.68
Collis P. Huntington Memorial Hospital Building.		
Gift,	\$40,000.00	
Interest,	164.62	40,164.62
Professorship of Hygiene, 1899 Fund (part),		10,572.89
" " 1902 " 		2,271.51
" " 1908 " 		1,617.75
Ingersoll Lecture Fund,		298.76
Gifts for a new University Library Building (interest),		580.88
G. C. Lodge and J. T. Stickney Memorial Fund (part), . . . . .		.61
William Belden Noble Lectures Fund.		
Interest,	\$1,294.90	
Sales,	175.73	1,470.6
Henry S. Nourse Fund (part),		1,001.20
Robert Troup Paine,		1,986.55
Lectures on Political Economy Fund,		559.55
Retiring Allowance Fund,		17,946.55
Gift for Decorating Front of the Nelson Robinson, Jr. Hall		
(interest),		247.06
James Skillen Memorial Fund,		526.56
George Smith Bequest,		18,046.35
Gifts for Improvements and Additions to The Soldier's Field,		5,000.00
Alexander W. Thayer Fund (part),		480.00
John E. Thayer Fund, Quarterly Journal of Economics.		
Interest,	\$790.70	
Sales,	2,205.75	2,996.45
Charles Wilder Fund,		1,940.00
Daniel Williams Fund,		795.21
Sarah Winslow Fund,		230.76
Woodland Hill Fund, use of laboratory,		1,000.00
		<u>\$354,171.20</u>

FUNDS AND GIFTS, ETC. (CONTINUED)

EXPENDITURE

Anonymous Fund (part) annuity,		\$8,350.00
Francis H. Burr Memorial Gift,		77.25
Gifts for Arnold Arboretum Building Construction,		98.00
Bussey Trust (part).		
Annuities,	\$4,000.00	
Taxes,	5,836.56	9,836.56
Gift from the Carnegie Foundation Retiring Allowances,		87,971.66
Class of 1853 Fund, Secretary of the Class,		149.01
" 1856 " " " "		300.00
Edwin Conant Fund (part) claim and legal expenses,		1,205.68
Caroline Brewer Croft Fund (part) annuity,		2,290.50
Dr. John C. Cutter Bequest, annuity,		409.72
Dental School Building.		
Interest on advances,		8,820.84
Paul Dudley Fund, legal services,		50.00
Calvin and Lucy Ellis Fund (part) taxes,		155.55
Germanic Museum Building.		
Collection charges on cheque in payment of gift,		100.00
Charles Gross Memorial Fund, exchange charges,		1.06
Wolcott Gibbs Memorial,		192.50
Godkin Lecture Fund, salary of lecturer,		600.00
Gurney Fund (part) annuities,		500.00
Gift for Gray Herbarium (Kidder Wing) construction,		151.97
Charles L. Hancock Bequest, taxes,		15.68
Collis P. Huntington Memorial Hospital Building,		82,189.27
Professorship of Hygiene, 1899 Fund (part) annuity,		10,018.78
" " 1902 " " "		1,865.41
" " 1908 " " "		1,158.15
Ingersoll Lecture Fund, salary lecturer,		200.00
G. C. Lodge and J. F. Stickney Memorial Fund, exchange charges on foreign subscriptions,		.61
William Belden Noble Lectures Fund,		1,381.24
Henry S. Nourse Fund.		
Annuity,	\$1,000.00	
Insurance on house,	1.20	1,001.20
Lectures on Political Economy Fund,		100.00
Retiring Allowance Fund,		16,020.94
Henry L. Pierce Residuary (Medical) Fund, legal services,		707.78
Gift for Decorating Front of Nelson Robinson, Jr. Hall,		802.16
John Simpkins Hall,		87.97
James Skillen Memorial Fund, annuity,		800.00
George Smith Bequest, annuities,		900.00
Gifts for Improvements and Additions to The Soldier's Field.		
Interest on advances,		619.01
Alexander W. Thayer Fund, annuity,		480.00
Amount carried forward,		\$129,048.42

FUNDS AND GIFTS, ETC. (CONTINUED)

EXPENDITURE

Amount brought forward,	\$129,048.45	
John E. Thayer Fund, Quarterly Journal of Economics, . . .	3,811.81	
John H. Treat Fund, taxes,	33.75	
Charles Wilder Fund, annuities,	1,600.00	
Daniel Williams Fund.		
Treasurer of Herring Pond Indians,	\$219.00	
Treasurer of Mashpee Indians,	465.76	684.76
Sarah Winslow.		
Teacher at Tyngsborough,	\$93.56	
Minister " "	93.56	
Commission on income, credited to University, . .	5.77	192.89
Woodland Hill Fund.		
Taxes,	\$1,108.64	
Interest on advances,	275.92	1,384.56
		<u>\$136,255.72</u>
Less Balance of Annuity to Medical School, Schedule 15,	273.44	
		<u>\$135,982.28</u>
General Surplus, made up as follows:		
Unexpended balance of new gifts for buildings		
carried to Funds and Gifts,	\$194,307.83	
Restricted Income unused carried to Funds and Gifts, . .	23,234.90	
Amount carried to General Suspense to repay former		
advances,	4,576.59	
	<u>\$222,119.32</u>	
Less advances to Funds and Gifts carried to General		
Suspense,	3,930.40	218,188.92
		<u><u>\$354,171.20</u></u>

*Certificate of the Committee of the Overseers of Harvard College, for
examining the Accounts of the Treasurer*

The committee appointed by the Overseers of Harvard College to examine the accounts of the Treasurer for the year ending June 30, 1911, have, with the assistance of an expert chosen by them, examined and audited the Cash-book and Journal covering the period from July, 1910, to June 30, 1911, inclusive, and have seen that all the bonds, notes, mortgages, certificates of stock, and other evidences of property, which were on hand at the beginning of said year, or have been received by him during said year, are now in his possession, or are fully accounted for by entries made therein; they have also noticed all payments, both of principal and interest, indorsed on any of said bonds or notes, and have seen that the amounts so indorsed have been duly credited to the College.

They have in like manner satisfied themselves that all the entries for moneys expended by the Treasurer, or charged in his books to the College, are well vouched; such of them that are not supported by counter entries being proved by regular vouchers and receipts.

They have also, by the aid of said expert, satisfied themselves that all the entries for said year are duly transferred to the Ledger, and that the accounts there are rightly cast, and correctly balanced.

(Signed)

F. L. HIGGINSON, *Chairman*,
WILLIAM ENDICOTT, JR.
WILLIAM A. GASTON,
ARTHUR LYMAN,
JOHN L. SALTONSTALL,
GRAFTON ST. L. ABBOTT,
ALLAN FORBES,
RICHARD C. STOREY.

*Of the
Committee on behalf of the
Board of Overseers.*

Boston, January, 1912.

INDEX

Two or more entries on a page are indicated by a small figure at the right of the page number: 20* indicates three entries on page 20.

Abbreviations are used as follows:—

<i>A.</i> , Arnold Arboretum;	<i>L.</i> , Law School;
<i>B.</i> , Book Funds;	<i>M.</i> , Medical School;
<i>Be.</i> , Beneficiary and Loan Funds;	<i>O.</i> , Observatory;
<i>C.</i> , College;	<i>P.</i> , Professorship Funds;
<i>D.</i> , Divinity School;	<i>Pr.</i> , Prize Funds;
<i>F.</i> , Fellowship Funds;	<i>S.</i> , Scholarship Funds;
<i>U.</i> , University.	

- Abbot (*S.*), 64, 92, 102.
 Abbot, J. W. P., 60, 91.
 Adams Estate, 82.
 Advancement of Astronomical Science (1901), 49, 78, 142, 143.
 Advancement of Astronomical Science (1902), 49, 78, 142, 143.
 Aesculapian Club (*S.M.*), 76, 77, 132.
 Agassiz, A., Bequest, 12, 48, 78, 144.
 Agassiz, A., Bequest for Publications, 12, 78, 144, 145*.
 Agassiz Memorial, 78, 144.
 Alford (*P.*), 60, 90.
 Alford (*S.*), 64, 92.
 Alumni Directory, 88.
 Ames Fund (*L.*), 72, 126.
 Ames, J. B. (Loan), 72, 126.
 Ames, J. B. (*Pr.*), 72, 126, 127.
 Ames, O., 70, 123.
 Ames, R. C. (*Be.*), 67, 95, 105.
 Anatomical Research, 22, 76, 130, 138.
 Anatomy, Comparative (Gift), 76, 138.
 Andrews, H. C., 70, 123.
 Annual Catalogue, 87.
 Anonymous (*F.*), 76.
 Anonymous Fund, 12, 50, 59, 82, 155, 157.
 Anonymous Gift (Special Aid), 22*, 68, 67, 95, 105.
 Anonymous Gift (Special Aid, *M.*), 23, 129, 132.
 Anthropology Department, 108.
 Antitoxin Laboratory, 138.
 Appleton Chapel, 89, 111.
 Schedule 28, 151.
 Income, 151.
 Expenditure, 151.
 Appleton, J. A. (*F.*), 72, 117, 118.
 Appleton, N. (*Be.*), 67, 95.
 Appleton, T. G., 78, 142.
 Appropriations, 108, 109, 120, 134.
 Arboretum Construction, 78, 138.
 Archaeology, Central American (*F.*), 22, 64, 146*.
 Architecture, 41, 73, 117, 119, 120.
 Architectural League (*S.*), 119.
 Arnold Arboretum, 78, 138.
 Arnold Arboretum, 13, 23, 26, 37, 42.
 China, Expedition to, 78, 139*.
 Funds, 73.
 Schedule 18, 138.
 Income, 138-139.
 Expenditure, 139.
 Arnold Arboretum, Building Gifts, 79, 155, 157.
 Arnold, J., 78, 138.
 Astronomy Department, 108, 109.
 Austin, D. (*C.*), 60, 118.
 Austin, D. (*D.*), 70, 123.
 Austin, E., 80, 90, 91, 92, 95, 101, 102, 110, 117*, 118, 120, 129.
 Austin, E. (Bacteriological Laboratory), 74, 130, 138.
 Austin, E., Loans Rep'd (*Be.*), 72, 105, 119.
 Ayer, A., 70, 123.

- Bacteriological Laboratory, 76, 134.
 Baker, J., 70, 133.
 Baker, W. F. (*U.*), 13, 45, 59, 84, 116.
 Baker Estate, 81, 82.
 Balance Sheet, 6, 7.
 Baldwin, W. H., Jr. (*U.*), 59, 91.
 Baldwin, W. H., Jr., 1885, 60, 98.
 Band Music, 59, 84.
 Barnard, Caroline M., 13, 60, 98.
 Barnard, John (*C.*), 60, 84.
 Barnard, J. M. and A. (*L.*), 73, 136.
 Barringer, E. M., 74, 128, 129, 132.
 Barringer, J. B., 60, 90.
 Bartlett (*S.*), 64, 92, 102.
 Bassett (*S.*), 64, 92, 102.
 Belknap, J. (*Pr.*), 37, 68, 97, 105.
 Bemis (*P.*), 73, 136.
 Beneficiary and Loan Funds, 67.
 Receipts, 95.
 Payments, 105.
 Beneficiary Money Returned (*D.*), 71, 123.
 Bennett, J. G. (*Pr.*), 68, 97.
 Bennett, P. S. (*Pr.*), 68, 97.
 Bermuda Biological Station, 48, 68, 100, 107, 145.
 Bigelow (*S.*), 64, 92, 102.
 Bigelow, A., 59, 84.
 Billings, L. F. (*S.*), 77, 129, 132.
 Billings, R. C. (*A.*), 49, 78, 138.
 Billings, R. C. (Gray Herbarium), 60, 141.
 Billings, R. C. (*M.*), 74, 128, 133.
 Billings, R. C. (*Pr.*), 71, 123, 124.
 Billings, R. C. (Stillman Infirmary), 79, 154.
 Bird, C. S. (*S.*), 64, 92, 102.
 Blake, S., 59, 84.
 Blanchard, C. F., 59, 84.
 Blanchard, J. A., 60, 91.
 Bolles, F., Memorial (*Be.*), 67, 95, 105.
 Bond Gifts (*O.*), 78.
 Bonney, F. P., Gift, 63.
 Book Fund of the Class of 1881, 69, 98, 106.
 Boott, F. (*Pr.*), 68, 97, 98, 105.
 Boott, Income for Books, 69, 98, 106.
 Borden (*S.*), 64, 92.
 Boston Newsboys' (*S.*), 66, 94.
 Botanic Department, 60, 98, 107, 140.
 Botanic Garden, 25³, 81.
 Botanic Garden (balance), 140.
 Schedule 19, 140.
 Income, 140.
 Expenditure, 140.
 Botanic Garden, Cases, 63, 140.
 Botanical Museum, 26, 81.
 Schedule 20, 141.
 Income, 141.
 Expenditure, 141.
 Botany Department, 23, 63, 99, 108, 109.
 Bowditch (*S.*), 64, 92, 102.
 Bowditch, J. I. (*M.*), 74, 130, 133.
 Bowditch, J. I. (*O.*), 78, 142.
 Bowditch, N. I. (*B.*), 69, 83, 112, 114.
 Bowdoin (*Pr.*), 68, 97, 105.
 Bowdoin, W. G., Jr., (*S.*), 26, 92, 102.
 Boyden, U. A., 78, 83, 142, 143.
 Boylston (*P.*), 60, 90.
 Boylston, Elocution (*Pr.*), 68, 97, 105.
 Boylston, W. N. (*M., B.*), 74, 130, 133.
 Boylston, W. N. (*M., Pr.*), 77, 130, 133.
 Bradford, S. D., 59, 84.
 Bradley, W. L., 26, 78, 138, 139.
 Brattle, W. (*Be.*), 67, 95.
 Bremer, M. R. (*M.*), 76, 133.
 Bright (*B.*), 69, 112, 114.
 Bright (*S.*), 64, 92, 102, 117, 118.
 Bright Legacy, 80, 92, 112.
 Brighton Marsh Fence, 79.
 Brimmer, 59, 90.
 Brooks House, Phillips, 89, 111, 121, 122, 125, 128.
 Funds, 78.
 Schedule 29, 152.
 Income, 152.
 Expenditure, 152-153.
 Brooks House, Phillips, Endowment, 78, 152.
 Brown, J. B. and B., 74, 128.
 Browne (*S.*), 65, 92, 102.
 Buckley, D. A. (*Be.*), 46, 67, 96, 105, 117, 118.
 Buckminster, M. W. (*S.*), 65, 92, 102.
 Bullard Professorship of Neuropathology, 74, 128.
 Bullard, W. N. and K. E. (*M.*), 76, 130, 133.
 Burr (*S.*), 65, 92, 102.
 Burr, F. H., Memorial, 23, 49, 79, 155, 157.

- Burr, R. D. (B.),** 71, 124^a.
Bursar's Office Expenses, 86.
Bussey (A.), 78, 139.
Bussey (P., D.), 71, 128.
Bussey, B. (P., L.), 72, 126.
Bussey, B., Trust, 49, 80, 82, 128, 126, 137, 155, 157.
Bussey Institution, 27, 81, 137, 138.
 Funds, 78.
 Schedule 17, 137.
 Income, 137, 138.
 Expenditure, 138.
Buttrick, A. W. (Be.), 71, 123, 124.

Cabot, J. J. (S.), 77, 129, 132.
Cabot, W. C., 67, 96, 105.
Cancer Commission Secretary, 28, 180, 138.
Cancer Hospital Endowment, 18, 74, 130.
Cancer Hospital Maintenance, 19, 74, 130.
Carnegie Foundation for the Advancement of Teaching, 27, 82, 155, 157.
Carter, J. C. (U.), 59, 84.
Carter, J. C. (P., L.), 72, 126.
Carter, J. C., Loan (L.), 72, 126.
Carter, J. W., 45, 59, 84.
Cary, T. (S.), 71, 123, 124.
Castle, W. R. (B.), 47, 69, 112, 114.
Cercle Français de l'Université Harvard (F.), 35, 91, 101.
Certificate, Committees to examine the Treasurer's Accounts, 159.
Chapman, G. (S.), 71, 124^a.
Cheever, D. W. (S.), 77, 129, 132.
Chemistry Department, 107, 109.
Child, F. J. Memorial, 60, 82, 98, 106.
China, Gifts for Expedition to, 189^a.
Chinese Students, 27, 80, 82, 96.
Choate, R. S. (S.), 65, 92, 102.
Clapp, J., 71, 123.
Clapp, J. (S.), 71, 124^a.
Clark, George Newhall (S.), 46, 65, 92, 102.
Clarke, T. W. (S.), 20, 65, 92.
Class Funds, 79.
Class of 1802 (S.), 65, 92, 102.
Class of 1814 (S.), 65, 92, 102.
Class of 1815, Kirkland (S.), 65, 92, 102.
Class of 1817 (S.), 65, 92, 102.
Class of 1828 (S.), 65, 92, 102.
Class of 1834, 49, 79, 155.
Class of 1835 (S.), 65, 92, 102.
Class of 1841 (S.), 65, 92, 102.
Class of 1842, 79, 155.
Class of 1844, 13, 49, 79, 155.
Class of 1846, 79, 155.
Class of 1851, 69, 114.
Class of 1851 (C. F. Dunbar), 69, 114.
Class of 1852, Dana (S.), 65, 92, 102.
Class of 1853, 49, 79, 155, 157.
Class of 1856, 79, 155, 157.
Class of 1856 (S.), 65, 92, 102.
Class of 1867 (S.), 13, 65, 92.
Class of 1868, Free Bed, 79, 154.
Class of 1877 (S.), 65, 92, 102.
Class of 1877, Strobel Memorial, 20, 70, 118, 115.
Class of 1879 (Loan, M.), 38, 76, 130, 132.
Class of 1880, 60, 90.
Class of 1881 (B.), 69, 98, 106.
Class of 1881, Twenty-fifth Anniversary Fund, 18, 62, 91.
Class of 1882, 13, 60, 91.
Class of 1883 (S.), 65, 92, 102.
Class of 1883 (U.), 14, 19, 59, 84.
Class of 1883, Special Fund, 60, 98.
Class of 1884 Fund (C.), 14, 60, 91.
Class of 1885, Gift, 14, 60, 91.
Class of 1886 Fund, 14, 60.
Class of 1909, Dental Endowment Fund, 15, 77.
Class Subscription, 60, 90.
Classical Department (S.), 65, 98.
Classical Library, 28, 82, 107.
Classical Publication Fund of the Class of 1856, 60, 82, 98, 106.
Classics, Department of the, 27, 28, 82, 99, 108.
Codman, E. W., 46, 60, 91.
Coggan, John, 60, 84.
College,
 Funds, 60.
 Sundry Funds, 63-64.
 Schedule 8, 90.
 Income, 90-101.
 Expenditure, 101-112.
 Schedule 10, 116.

- Comparative Literature Department, 108.
- Comparative Medicine, School of, 75, 181.
- Conant, E. (*D.*), 71, 123.
- Conant, E. (*Library*), 69, 112, 113, 114, 157.
- Constantius, 69, 83, 112, 113, 114.
- Construction Gift (*A.*), 78, 138.
- Construction Gifts, 79.
- Coolidge, A. C. and C. L. Hay Fund, 14, 69, 112.
- Coolidge, Debating (*Pr.*), 68, 97, 105.
- Coolidge, E. E., 46, 59, 84, 96, 105.
- Coolidge, T. J., 46, 60, 99, 106.
- Corporation Office Expenses, 85.
- Cotting Gift (*Be.*), 77, 129, 132.
- Cotton, T., 59, 84, 86.
- Cowdin, J., 59, 84.
- Craig, John (*Pr.*) 29, 97, 105.
- Croft, C. B., 22, 75, 130, 133, 155, 157.
- Crowninshield (*S.*), 65, 93, 103.
- Cryptogamic Herbarium, 81, 98.
- Cuban Teachers, Gifts for, 80.
- Cudworth, W. H. (*S.*), 13, 65, 82, 93, 103.
- Cummings, F. H. (*S.*), 65, 117, 118.
- Cutter, J. C. (*M.*), 14, 48, 75, 128, 155, 157.
- Cutting, Bayard (*F.*), 14, 64, 91.
- Cutting, Bayard, Income for Books, 69, 112, 114.
- Cutting, W. Bayard, Jr. (*F.*), 15, 64, 91.
- Cutting, W. Bayard, Jr., Bequest (*B.*), 15, 69, 112, 114.
- Dana, Class of 1852 (*S.*), 65, 92, 102.
- Dane (*P.*), 72, 126.
- Danforth, T. (*Be.*), 67, 96.
- Dante (*Pr.*), 68.
- Day, M. (*Be.*), 67, 96, 105.
- Dean's Office Expenses :
- College, 108.
- Dental School, 136.
- Divinity School, 124, 125.
- Faculty of Arts and Sciences, 108.
- Graduate School of Applied Science, 119.
- Graduate School of Arts and Sciences, 108.
- Graduate School of Business Administration, 108, 122.
- Law School, 127.
- Medical School, 134.
- Delano, W. Jr., Loan (*S.*), 82.
- Denny (*B.*), 69, 112, 114.
- Dental Endowment Fund, Class of 1909, 15, 77.
- Dental School, 29, 82.
- Funds, 77.
- Schedule 16, 136.
- Income, 136.
- Expenditure, 136-137.
- Sundry Gifts, 29, 77.
- Dental School (balance), 82.
- Dental School, Building, 82, 155, 157.
- Dental School Endowment, 16, 77, 136.
- Dental School Research, 77, 136.
- Derby, G. and M. (*S.*), 65, 93, 103.
- Dexter, J. (*S.*), 65, 93, 103.
- Dexter Lectureship, 71, 123.
- Dillaway, G. W. (*F.*), 64, 91.
- Divinity School, 42^a, 123.
- Funds, 70.
- Schedule 13, 123.
- Income, 123-124.
- Expenditure, 124-125.
- Library, 125.
- Divinity School (balance), 81, 123.
- Doe, O. W. (*C., S.*), 65, 93, 103.
- Doe, O. W. (*M., S.*), 77, 129, 132.
- Dormitories :
- College, 101, 109.
- Divinity School, 124, 125.
- Freshman, 80, 79, 101, 156.
- Dorr, G. B., 45, 59, 84.
- Draper, F. W., 82.
- Draper, G., 45, 59, 84.
- Draper Memorial, 29, 78, 143^a.
- Dudley, P., 60, 155, 157.
- Dunbar, C. F. (Class of 1851), 69, 114.
- Duplicate Money (*B.*), 70, 113, 115.
- Eaton (*P.*), 60, 90.
- Economics Department, 40, 63^a, 99, 107, 108.
- Edda Club (*S.*), 17, 65.
- Eddy, R. H., 45, 59, 84.
- Edmonds, J. R., Bequest, 29, 78, 143.
- Education Department, 29, 108.
- Eliot (*P.*), 60, 90.

- Eliot, Jon. Phillips' Gift (P.),** 46, 60, 90.
Eliot, W. S. (S.), 65, 93, 103.
Ellery, J. (Be.), 67, 96.
Ellis, C. and L., 48, 75, 128, 155, 157.
Ellis, C. and L. (Aid), 49, 80, 90, 96, 105.
Ellis, H., 59, 84.
Emerson, G. H. (S.), 65, 93, 103.
Emerson Hall (Furnishing), 64, 107.
Emperor William, 74, 148.
Employment, Secretary for, Office Expenses, 89.
Engineering (Electrical Apparatus), 119.
Engineering (P.), 73, 117.
Engineering Camp, Squam Lake, 81, 118, 119.
Engineering Department, 119, 120.
English Department, 29, 63, 99, 108.
Erving (P.), 60, 90.
Ethics, Social, 23, 42, 64, 99, 107.
Eveleth, J. (S.), 65, 93, 103, 117, 118, 129, 132.
Exhibitions (Be.), 67, 96, 105.
Exhibits:
 A, 6-7.
 B, 8-9.
 C, 10-11.
 D, 12-21.
 E, 22-44.
Expenditures and Receipts, General Statement, 10-11.
Fabyan, G., Foundation for Comparative Pathology, 75, 130, 133.
Fabyan, G., Foundation, Special, 75, 130.
Fall River (S.), 65, 93, 103.
Farrar, E. (B.), 69, 112, 114.
Farrar (S.), 65, 93, 103.
Farrington, C. F. (M.), 75, 130.
Fay, S. P. P. (1798) (S.), 72, 126, 127.
Fees:
 Auditors', 100.
 Examination, 100, 182.
 Graduation, 100, 118, 121, 131.
 Hemenway Gymnasium, 153.
 Infirmary (Dental School), 136.
 Laboratory, 100, 109, 118, 120, 132, 140.
 Laboratory (balances), 81, 83.
 Library, 114.
 Matriculation, 181.
 Medical Clinic, 131.
 Microscopes, 132.
 Registration, 100.
 Repaid to Instructors, 134.
 Shop-work, 118.
 Stillman Infirmary, 154.
 Summer School Theology, 124.
 Tuition, 100, 118, 121, 124, 126, 131, 136.
Fellowships:
 Funds, 64.
 Receipts, 22, 35, 37, 42, 43, 44, 91.
 Payments, 101, 118.
Fine Arts Department, 108.
Fines (B.), 70, 114, 115.
Fines Loan, 67, 96, 105.
Fisher (P.), 60, 90.
Fisher, G. (S.), 72, 126, 127.
Fisher, G. and E. H. (S.), 65, 93, 103.
Fitch, T. (Be.), 67, 96.
Fitz, S. E., 75, 128.
Flynt, E. (Be.), 67, 96.
Flynt, H. (Be.), 67, 96.
Flynt, H. (for Tutors), 60, 90, 117.
Fogg Art Museum, 30², 89, 111, 149, 150.
 Funds, 79.
 Schedule 27, 149.
 Income, 149.
 Expenditure, 150.
 Special Exhibit, Gifts, 149, 150.
Fogg Art Museum (balance), 81, 82.
Fogg, W. H., 79, 149.
Folsom Memorial, Charles Follen (F.), 76, 129, 132.
Forestry, Division of, 28, 73, 81, 82, 118, 119, 120.
Foster, J. (Be.), 77, 80, 82, 129, 132.
Foster, R. W., 59, 84.
Free Bed Fund of the Class of 1868, 79, 154.
Free Bed Fund for Stillman Infirmary, 79, 154.
French, J. D. W., 45, 59, 84.
French and other Romance Languages Department, 108.
French, Library, 63.
Freshman Dormitories, 30, 79, 101, 156.
Freshman Loan (Be.), 30, 67, 96, 105.

Frothingham (*P.*), 71, 123.
 Fuller, A. W., 71, 123.
 Fund for Permanent Tutors, 60, 90.
 Fund for Religious Services, 60, 151.
 Funds and Gifts, 59.
 Funds and Gifts for Special Purposes, 155.
 Schedule 32, 155.
 Income, 155-156.
 Expenditure, 157-158.
 Funds in Trust for Purposes not connected with the College, 80.

 Gambrell, R. A. (*S.*), 65, 93, 103.
 Gardner, G. A., 61, 98, 106.
 Garrison, L. McK. (*Pr.*), 68, 97, 105.
 Geology Department, 108, 109.
 Geology and Geography, Gifts, 63, 107.
 German Department, 108.
 Germanic Museum, 26, 30, 63, 89.
 Funds, 74.
 Schedule 26, 148.
 Income, 148.
 Expenditure, 148-149.
 Germanic Museum, 74, 148.
 Germanic Museum (balance), 81, 148.
 Germanic Museum Building, 74, 156, 157.
 Germanic Museum (Collections), 148.
 Germanic Museum Endowment, 74, 148.
 Gibbs, H. (*Be.*), 67, 96.
 Gibbs, V. B. (*S.*), 73, 144, 145.
 Gibbs, Wolcott, Memorial, 31, 79, 156, 157.
 Gifts received for:
 Funds (capital), 12-21.
 Immediate use, 22-44, 121, 136, 137, 139, 140, 141², 143, 145, 146.
 Glover, J. (*Be.*), 67, 96.
 Godkin Lecture, 61, 156, 157.
 Goodwin, C. H. (*S.*), 65, 93, 103.
 Goodwin, O., Memorial (*F.*), 64, 91, 101.
 Gore, 59, 84.
 Gospel Church, 61, 90.
 Gould, L., 71, 123.
 Government Department, 82, 99, 107.
 Graduate School of Applied Science, 111.
 Funds, 72.
 Schedule 11, 117.
 Income, 117-118.
 Expenditure, 118-121.

Graduate School of Applied Science (balance), 81.
 Graduate School of Arts and Sciences, 111.
 Graduate School of Arts and Sciences (*S.*), 106.
 Graduate School of Business Administration, 26, 27², 41, 48, 73, 81, 82, 121.
 Schedule 12, 121.
 Income, 121.
 Expenditure, 122.
 Gray (Engravings), 79, 149, 150.
 Gray, A. (Copyrights), 141.
 Gray, A. (Memorial), 61, 141.
 Gray, A. (*P.*), 61, 141, 142.
 Gray Herbarium, 23, 31, 141.
 Schedule 21, 141.
 Income, 141.
 Expenditure, 142.
 Gray Herbarium (balance), 81, 141.
 Gray Herbarium Construction, 79, 155, 157.
 Gray, J. C., 45, 59, 84.
 Gray, Zoölogical Museum, 73, 144.
 Greene, B. D. (*S.*), 65, 93, 103.
 Greene, M. F. (*S.*), 33, 93, 103.
 Greene, Rebecca A., 16, 75, 128.
 Greenleaf, P. 51, 80.
 Greenleaf, P. (Aid) (*Be.*), 67, 96, 105.
 Greenleaf, P. (*B.*), 83, 112, 114².
 Greenleaf, P. (*S.*), 65, 93, 103.
 Greenough, F. B., 75, 130.
 Gross, Charles, Memorial, 16, 69, 112, 114, 156, 157.
 Gurney, 61, 90, 156, 157.
 Gymnasium, see Hemenway.

 Hale, G. S. and E. S., 61, 98.
 Hall, L. J., 71, 124².
 Hancock, C. L., 17, 49, 71, 90, 91, 123, 147, 156, 157.
 Hancock, J. (*P.*), 71, 123.
 Harding, Selwyn L., Scholarship of the Class of 1886, 17, 65, 93.
 Harlow, E. A. W. (*Be.*), 67, 96, 105.
 Harlow, R. H. (*Be.*), 67, 96, 105.
 Harris (*F.*), 64, 91.
 Harris, C., 78, 142.
 Harris, H., 80, 84, 128.
 Harvard Club of Boston (*S.*), 33, 65, 93, 103.

- Harvard Club of Buffalo (*S.*), 82, 108.
 Harvard Club of Chicago (*S.*), 33, 82, 93, 103.
 Harvard Club of Cleveland (*S.*), 82, 103.
 Harvard Club of Connecticut Valley (*S.*), 33, 93, 103.
 Harvard Club of Fitchburg (*S.*), 33, 82, 93, 103.
 Harvard Club of Hawaii (*S.*), 33, 93, 103.
 Harvard Club of Hingham (*S.*), 33, 93, 103.
 Harvard Club of Indiana (*S.*), 33, 93, 103.
 Harvard Club of Lawrence (*S.*), 33, 65, 93.
 Harvard Club of Lowell (*S.*), 34, 93, 103.
 Harvard Club of Lynn (*S.*), 34, 93, 103.
 Harvard Club of Milwaukee (*S.*), 34, 93, 103.
 Harvard Club of Nebraska (*S.*), 34, 93, 103.
 Harvard Club of New Jersey (*Pr.*), 34, 68, 93, 103.
 Harvard Club of Rochester (*S.*), 34, 65, 93.
 Harvard Club of San Francisco (*S.*), 34, 65, 93, 103.
 Harvard Club of Washington, D. C. (*S.*), 34, 65, 93, 103.
 Harvard Club of Western Pennsylvania (*S.*), 34, 93, 103.
 Harvard Club of Worcester (*S.*), 34, 94, 103.
 Harvard Dental Alumni Endowment, 16, 77, 136.
 Harvard Dining Association, 82.
 Harvard Economic Studies, 63, 82, 106.
 Harvard Engineering Society of New York (*Be.*), 34, 67, 96, 105.
 Harvard Medical Alumni, 74, 129.
 Harvard Medical Alumni Gifts, 74.
 Harvard Memorial Society, 80, 156.
 Harvard Menorah Society (*Pr.*), 82, 105.
 Harvard Oriental Series, 61, 98, 106.
 Harvard Psychological Studies, 63, 106.
 Hastings, W., 45, 59, 84.
 Haven (*D.*), 71, 123.
 Haven (*O.*), 78, 142.
 Haven, H. A. (*B.*), 69, 112, 114.
 Haven, J. A. (*S.*), 66, 94, 103.
 Hayden, L. and H. (*S.*), 77, 129, 132.
 Hayes, F. B. (*B.*), 69, 112, 114.
 Hayward, G. (*B.*), 69, 112, 115.
 Hayward, J., 78, 142.
 Hemenway (*F.*), 74, 146.
 Hemenway, Mary, for Archaeology, 17, 74, 146².
 Hemenway Gymnasium, 111, 121, 122, 125, 128.
 Schedule 30, 153.
 Income, 153.
 Expenditure, 153-154.
 Herbarium, 61, 141.
 Hersey (*P.*), 61, 90, 129.
 Hersey, Thomas Lee's Gift (*P.*), 61, 90.
 Higginson, G. (*P.*), 75, 129.
 Higginson, H. L., 45, 59, 84.
 Hilton, W. (*S.*), 66, 94, 103, 117, 118, 130, 132.
 History, Books, 63, 99, 106.
 History, Department of, 63, 99, 106, 108.
 Hoar, E. R. (*S.*), 66, 94, 103.
 Hoar, L. (*S.*), 66, 94, 103.
 Hoar, S., 71, 123.
 Hodges (*S.*), 66.
 Hodges, P. C. (*S.*), 72, 117, 118.
 Hodges, R. M., 69, 94, 103, 113, 115.
 Hollis (*S.*), 66, 94, 103.
 Hollis, Divinity (*P.*), 61, 123.
 Hollis, Mathematics (*P.*), 61, 90.
 Hollis, T. (*B.*), 69, 113, 115.
 Hollis, Thomas (for Treasurer), 61, 84.
 Holworthy Hall Refitting, 84.
 Holyoke, E. (*Be.*), 87, 96.
 Homans Memorial (*P.*), 75, 129.
 Homer, S. (*B.*), 69, 113, 115.
 Hooper, E. W. (*F.*), 64, 91, 102.
 Hooper, S. (*P.*), 73, 82, 144, 145².
 Hopkins, E. (*Pr.*), 68, 97, 105.
 Houses, Use of, 85, 138, 143, 144.
 Hubbard, T., 61, 84.
 Hughes Loan, 72, 126.
 Huidekoper, E. and F. S. (*S.*), 35, 94, 103.
 Hulton, N., 61, 84.
 Humboldt, 78, 144.
 Humphrey, H. B. (*S.*), 66, 94, 103.
 Hunnewell, W. P., 73, 144.
 Huntington, Collis P., Memorial Hospital, 27, 79, 156, 157.
 Hutchinson, T., 61, 84.

- Hyde, G. B., 59, 84.
 Hygiene (*P.*), 12, 46, 62, 84, 156, 157.
 Hygiene Department, 109.
- Income and Expenditure:**
 Consolidated Statement, 8, 9.
 By departments, 10, 11.
- Infantile Paralysis Investigation, 85,
 76, 131, 133.
 Infirmary, Stillman, 79, 83, 154.
 Ingersoll Lecture, 61, 156, 157.
 Inspector of Grounds and Buildings,
 Office Expenses, 87.
 Insurance and Guaranty, 45, 59.
 Investments held June 30, 1911:
 General, 53-58.
 Special, 46-52.
- Jackson Foundation (*S.*), 71, 124².
 Jackson, H., Endowment, 75, 130, 133.
 Jackson Professorship of Clinical Medi-
 cine, 75, 129.
 Janitor's Office Expenses, 87.
 Jarvis (*B.*), 69, 113, 115.
 Jarvis, L., 59, 84.
 Jefferson Physical Laboratory, 81, 107,
 111.
 Jefferson Physical Laboratory (balance),
 82, 99.
 Jennings, H. (*S.*), 72, 117, 118.
 Johnson, William Otis (*S.*), 18, 77, 130.
 Jones, C. L. (*S.*), 66, 94, 104.
 Jones, C. M. (*S.*), 77, 130, 132.
- Keayne, R. (*Be.*), 67, 96.
 Kendall, J. H. (*S.*), 71, 124².
 Kendall, N. (*S.*), 71, 124².
 Kidder, H. P. (*D.*), 71, 123.
 Kidder, H. P. (*U.*), 59, 84.
 Kimball, B. (*Be.*), 68, 96, 105.
 Kirkland, Class of 1815 (*S.*), 65, 92,
 102.
 Kirkland, J. T. (*F.*), 64, 91, 102.
 Kissinger, John R. (*F.*), 18, 77, 130.
 Knight, G. A. (*Pr.*), 68, 97.
 Kuhn, H., Memorial (*P.*), 48, 75, 129.
- Laboratory Fees (balances), 81, 83.
 Land and Buildings:
 General Investment, 58.
 Land, Use of, 85.
- Lane, F. A. (*B.*), 69, 83, 113, 115.
 Langdell (*L.*), 72, 126, 127.
 Law School:
 Funds, 72.
 Schedule 14, 126.
 Income, 126-127.
 Expenditure, 127-128.
- Law School (*B.*), 72, 126.
 Law School (balance), 81, 126.
 Law School Library, 72, 126.
 Lawrence, A., 61, 90.
 Lawrence, J., 61, 90, 117.
 Lawrence Scientific School, Loans Re-
 paid, 37, 72, 117, 119.
 Lecompte, W. A. (*P.*), 75, 130, 133.
 Lee, H. (*P.*), 61, 90.
 Lee, H., Memorial (*F.*), 64, 91, 102.
 Lee, J., 45, 59, 84.
 Lee, T. (Reading), 61, 90.
 Levy, H. M. (*C.*), 68, 96, 105.
 Levy, H. M. (*L.*), 72, 126, 127.
 Library, 23, 27, 28², 29, 35, 40.
 Funds, 69, 70.
 Schedule 9, 112.
 Income, 112-114.
 Expenditure, 114-116.
 Schedule 10, 116.
- Library Building, 80, 82, 156.
 Lienow, H., 71, 123.
 Lincoln, S., 18, 61, 98.
 Lindall, M. (*Be.*), 68, 96.
 Linder, A. H. (*S.*), 77, 130, 132.
 Loan, The, 96, 105.
 Locke, Henry Weidemann (*S.*), 36, 72,
 117.
 Lodge, G. C. and J. T. Stickney
 Memorial, 18, 69, 113, 156, 157.
 Lovering, J., 61, 82, 98, 106.
 Lowell (*B.*), 69, 83, 113, 115.
 Lowell (Botanic Garden), 61, 140.
 Lowell, F. C. (*B.*), 19, 69.
 Lowell, G. E. (*S.*), 66, 94, 104.
 Lowell, H. N., Dental, 77, 136².
 Lowell, H. N. (*M.*), 37, 75, 131, 133.
 Lowell Memorial Library (*B.*), 63.
 Lowery Memorial, Woodbury, 61, 91,
 102.
 Lunar Photographs (Publishing), 78.
 Lyman, A. T., 61, 63, 90, 107.
 Lyman, S. B. (*Be.*), 68, 96, 105.
 Lyman, S. B. (Loan), 68.

- Lyman, S. B.** (Loan, L. S. S.), 72, 117.
Lyman, T., 59, 84.
MacDowell (F.), 37, 91, 102.
McKay, G., Endowment, 19, 51, 72, 117.
McLean (P.), 62, 90.
Markoe (S.), 66, 94, 104.
Massachusetts Society for Promoting Agriculture (A.), 78, 131, 133.
Mathematics, Annals of (C.), 82, 111.
Mathematics, Books, 63, 99, 106.
Mathematics Department, 63², 99, 106, 107, 108.
Mathematics, International Commission (Expenses), 63, 107.
Matthews (S.), 66, 94, 104.
Mears, James Ewing, M.D. (S.), 38, 130, 132.
Medical Adviser's Office Expenses, 88.
Medical Library, 75, 131, 133.
Medical, Loan Fund, Class of 1879, 38, 76, 130, 132.
Medical School, 23, 38, 82.
 Funds, 74.
 Sundry Funds, 76.
 Schedule 15, 128.
 Income, 128-132.
 Expenditure, 132-135.
Medical School Clinic, 82.
Memorial Hall and Sanders Theatre, 89.
Merriam, C., 71, 123.
Merrick (S.), 66, 94, 104.
Metallurgical Chemistry, Laboratory, 73.
Mills, A. (Be.), 68, 97.
Mineralogy and Petrography Department, 109.
Mining Camp, 73, 118, 119.
Mining and Metallurgy, 31, 40, 73, 82, 117, 118, 119, 120.
Minot, C. (B.), 69, 83, 113, 115.
Morey (S.), 66, 94, 104.
Moseley, W. O. (P.), 75, 129.
Mowison, Lady (S.), 66, 94, 104.
Municipal Government Research, 43, 63, 99, 108.
Munroe (Be.), 68, 97, 105.
Munson, I., 59, 84.
Museum of Comparative Zoölogy, 12², 40, 44, 89, 111.
 Funds, 78.
 Schedule 23, 144.
 Income, 144-145.
 Expenditure, 145.
Museum of Comparative Zoölogy (balance), 81, 144.
Music Department, 22, 89, 62, 63, 82, 98, 99, 107, 109².
Neuropathology, 39², 76, 131, 134.
New Endowment (D.), 70.
Newgate, J., 62, 123.
New Subscription (M.), 75, 129.
Newsboys', Boston (S.), 66, 94.
Nichols, H. G. (S.), 66, 94, 104.
Nichols, L., 75, 129.
Noble, W. B., 62, 156, 157.
Normal Scholarships, 106.
Norton, C. E. (B.), 69, 83, 113, 115.
Norton, C. E. (F.), 46, 64, 91, 102.
Nourse, H. S., 45, 59, 84, 156, 157.
Observatory, 40.
 Funds, 78.
 Schedule 22, 142.
 Income, 142-143.
 Expenditure, 143-144.
Observatory Endowment, 73, 142.
Oliver, J. P. (S.), 77, 130, 132.
Osgood, L. (B.), 69, 113, 115.
Osgood, L. (S.), 66, 94, 104.
Osgood, M. (B.), 70, 113, 115.
Overseers, Board of, Expenditure, 85.
Paine (P.), 78, 142.
Paine, J. K., Memorial, 63, 99.
Paine, Robert Treat (F.), 64, 91, 102.
Paine, Robert Treat (O.), 78, 142.
Paine, Robert Troup, 50, 80, 156.
Palestine (Excavations), 80, 147, 148.
Palfrey Exhibition (Be.), 68, 97, 105.
Palmer, G. H. (S.), 19, 66, 94.
Park, T. L., Bequest, 19, 62, 91.
Parker, F. E., 45, 59, 84.
Parker, J. (F.), 64, 91, 102.
Parkman (P.), 71, 123.
Parkman, F. (F.), 64, 91, 102.
Parkman, G. F. (B.), 70, 113, 115.

- Parkman, G. F. (*M.*), 75, 129.
 Parkman, G. F. (*U.*), 59, 84.
 Parkman Memorial, Francis (*B.*), 47, 70, 118, 115.
 Pathological Laboratory, 75, 181, 183.
 Pathology, Department of, 28, 38, 40, 76, 181, 183.
 Pathology, Comparative, Department, 37, 76, 181, 183.
 Patria Society, The (*Pr.*), 68, 105.
 Peabody (*P.*), 49, 74, 146.
 Peabody, A. P., Memorial (*Be.*), 68, 97, 105.
 Peabody Building, 49, 74, 146.
 Peabody Collection, 49, 74, 146.
 Peabody, F. G., 62, 90, 98, 106.
 Peabody, G. F. (*S.*), 46, 66, 94, 104.
 Peabody Museum of American Archaeology and Ethnology, 39⁴, 40, 89, 111.
 Funds, 74.
 Schedule 24, 146.
 Income, 146.
 Expenditure, 146-147.
 Peabody Museum of American Archaeology and Ethnology (balance), 81, 88.
 Peirce, D. H., 62, 90.
 Peirce, J. M. (*S.*), 66, 94.
 Peirce, J. M. (*B.*), 62, 98.
 Pennoyer (*S.*), 66, 94.
 Perkins (*P.*), 62, 90.
 Perkins, C. E. (*S.*), 66, 83, 94, 104.
 Perkins, R. A. (*S.*), 66, 94, 104.
 Perkins, W., 59, 84.
 Permanent, 73, 144.
 Permanent Tutors, 60, 90.
 Peters, E. D. (*S.*), 40, 73, 117, 119.
 Philadelphia (*S.*), 66, 94, 104.
 Phillips, E. B., 78, 148.
 Phillips, J., 62, 91.
 Phillips, J. (*Eliot P.*), 60, 90.
 Phillips, W., Memorial (*S.*), 66, 94, 104.
 Philosophical Library, 63, 99, 107.
 Philosophy (*S.*), 40, 94, 104.
 Philosophy, Department of, 40², 63, 99, 107.
 Physical Laboratory, 62, 99.
 Physical Research (*F.*), 63, 107.
 Physics Department, 23, 40, 99, 107, 109².
 Physiology Department, 76.
 Pierce, H. L., 59, 83, 114.
 Pierce, H. L. (Residuary), 45, 59, 114, 144.
 Pierce, H. L. (Residuary) (*M.*), 19, 75, 129, 157.
 Plantation of Shrubs, 63, 100.
 Plummer (*P.*), 62, 90.
 Political Economy, see Economics.
 Political Economy, Lectures on, 61, 156, 157.
 Pomroy, W. (*Be.*), 71, 124³.
 Pope (*P.*), 62, 90.
 Porter, C. B. (*S.*), 77, 180, 182.
 Potter, S. A. (*Pr.*), 41, 97, 105.
 Potter, S. E., Endowment, 47, 62, 141.
 President's, 59, 85, 86.
 President's Office Expenses, 85.
 Preventive Medicine and Hygiene Department, 41, 180, 183.
 Prichard, W. M., 79, 149, 150.
 Princeton Fellowship, 64, 92, 126, 127.
 Printing Office Expenses, 110, 111.
 Prizes :
 Funds, 68.
 Receipts, 29, 97.
 Payments, 105.
 Proctor, 75, 181, 183.
 Proctor, E. H. (*Dental*), 77, 186.
 Psychology Department, 109².
 Public Buildings (*C.*), 109.
 Quinby, J. W., 71, 123.
 Quincy, J., 78, 143², 144.
 Quinquennial Catalogue, 87, 126.
 Radcliffe College, 83, 140, 145.
 Randall Hall Association, 83.
 Randall, J. W., 79, 83, 149, 150.
 Randall, J. W. and B. L., 79, 152.
 Rate of Dividing Income, 5.
 Receipts and Expenditures, General Statement, 10, 11.
 Recreation Grounds (*M.*), 38, 76, 131.
 Reed, W. (*S.*), 47, 66, 94, 104.
 Religious Services, 60, 151.
 Research (*L.S.*), 22, 72, 126.
 Retiring Allowances, 59, 135, 156, 157.
 Ricardo Prize (*S.*), 23, 66, 94, 104.
 Richmond, A. C., 71, 123.
 Riverside, 45, 59.
 Robinson, N., Jr., 73, 117², 118.

- Robinson, N., Jr., Additional, 47, 62, 90, 98, 106.
 Robinson, N., Jr., Hall, 64, 119, 156, 157.
 Robinson, N., Jr., Special Expense, 118, 119.
 Rockefeller, J. D., 75, 129.
 Rodger (S.), 66, 94.
 Rogers (F.), 64, 92, 102.
 Rogers, Ezekiel, 62, 85.
 Rogers, H. B. (S.), 66, 94, 104.
 Rogers, H. B., Memorial (F.), 64, 92, 102.
 Ropes, Eliza O. and Mary P. (P.), 47, 62, 90.
 Ropes, N., Jr. (S.), 66, 94, 104.
 Rotch, A., 73, 117.
 Royall (P.), 72, 126.
 Rumford (P.), 62, 90.
 Rumrill, J. A. (S.), 66, 94, 104, 126, 127.
 Ruppenner, Dr., 75, 129.
 Russell, Daniel, 62, 85.
 Russell, E. (S.), 66, 94, 104.
 Russell, J. L. (Botanic Garden and Gray Herbarium), 62, 140, 141.
 Russell, J. L. (D.), 71, 123.
 Russell, J. L. (U.), 60, 85.
- Salaries, Receipts, 23², 28, 29, 38, 40, 41, 63, 73, 90, 91.
 Sales (Pr.), 68, 97, 105.
 Sales (S.), 66, 94, 104.
 Sales, F. (B.), 70, 83, 113, 115.
 Salisbury (B.), 70, 113, 115.
 Salisbury, S., 70, 114.
 Saltonstall (S.), 66, 94, 104.
 Saltonstall, G., 73, 117.
 Saltonstall, L. (S.), 66, 94, 104.
 Saltonstall, M. (S.), 66, 94, 104.
 Sanskrit Department, 64, 99.
 Sargent, J. O. (Pr.), 68, 97, 105.
 Savage, J., 80, 95, 104, 114, 143.
 Sawin, G. W., 62, 98.
 Sayles, R. W. (C.), 62, 83, 98, 106.
 Sayles, R. W., Summer Course in Geology, 69, 83, 98, 106.
- Scholarships:
 Funds, 64.
 Receipts, 22, 23, 26, 28², 31, 33², 34¹¹, 35, 36, 38², 40², 92, 123, 129, 130.
 Payments, 102, 118, 119, 124, 132.
- Scholarship and Beneficiary Money Returned (Be.), 68, 97, 105.
 Scholarship Money Returned (Law), 42, 72, 126, 127.
 School of Comparative Medicine, 75, 131.
 Schurz, H., Memorial Free Bed, 79, 154.
 Searle, M. R., 60, 83, 149, 150.
 Sears, D. (O.), 78, 143.
 Sears, H. F., 75, 131, 133.
 Sears, Horace S. (D.), 71, 123, 124.
 Sears, Mrs. J. M. (A.B.), 78, 139².
 Sears Memorial, J. M., Jr. (Pr., L.), 42, 72, 126, 127.
- Secretary's Office Expenses:
 Faculty of Arts and Sciences, 108.
 Graduate School of Arts and Sciences, 108.
 Law School, 127.
 Semitic Building, 79.
 Semitic Collection, 80, 147, 148.
 Semitic Library, 41, 64, 99, 107.
 Semitic Museum, 41, 89, 125.
 Schedule 25, 147.
 Income, 147.
 Expenditure, 148.
- Sever (B.), 70, 113, 115.
 Sever (S.), 66, 95, 104.
 Sewall (S.), 66, 95, 104.
 Sewall, J. (Be.), 68, 97.
 Shaler Memorial, 62, 98, 106.
 Shapleigh, S. (B.), 70, 83, 113, 115.
 Shattuck (S.), 66, 95, 104.
 Shattuck, G. C. (P.), 48, 75, 129.
 Shattuck, G. C., Memorial (F.), 77, 129, 132.
 Shaw, for Business Research, 83, 122.
 Sheldon, A. R., 79, 85.
 Sheldon, F., 20, 50, 80, 92, 102, 117, 118, 129, 132.
 Shepard, R. H., 78, 152.
 Shepard, R. H. (Memorial), 79, 152, 153.
 Simpkins, J., Laboratories, 80, 157.
 Skillen Memorial, 75, 156, 157.
 Skinner, F. (A.), 78, 139.
 Skinner, Francis (Be.), 77, 130, 132.
 Slade (S.), 66, 95, 104.
 Smith (P.), 62, 90.
 Smith, D. (S.), 47, 66, 83, 95, 104.
 Smith, G., 50, 80, 156, 157.
 Smith Memorial, J. W., Jr., 20, 77, 136.

- Social Ethics** (Furnishings for the Department of), 64, 107.
- Social Ethics** (*F.*), 64, 92.
- Social Ethics**, Study of, 23, 42, 64, 99, 107.
- Social Workers**, School for, 42, 81, 100, 107.
- Sohier, G. B.** (*B.*), 70, 113, 115.
- Sohier, G. B.** (*Pr.*), 68, 97, 106.
- Soldier's Field, The; Improvements and Additions**, 83, 83, 156, 157.
- South American Expedition**, 148², 146.
- South End House** (*F.*), 42, 64, 92, 102.
- South End House Social Education** (*F.*), 43, 92, 102.
- Spackman, W. M.**, 62, 91.
- Spooner, W. B.**, 71, 123.
- Squam Lake Camp**, 81, 118, 119.
- Stickney, J.**, 73, 117.
- Stillman, J.** (*P.*), 75, 129.
- Stillman Infirmary Gift** (balance), 79, 154.
- Stillman Infirmary**, 83.
- Funds**, 79.
- Schedule 31**, 154.
- Income**, 154.
- Expenditure**, 154-155.
- Story** (*S.*), 66, 95, 104.
- Story, A.**, 78, 143.
- Stoughton** (*S.*), 47, 67, 95, 104.
- Strobel, E. H.**, **Memorial, Class of 1877** (*B.*), 20, 70, 113, 115.
- Strobel, E. H.**, **Memorial, Siam** (*B.*), 70, 83, 113, 115.
- Strong, C. P.** (*S.*), 77, 130, 132.
- Students**, Receipts from, 100, 118, 121, 124.
- Subscription for Library** (*B.*), 70, 83, 113, 115.
- Sugar Cane Investigations**, 64, 140.
- Summer Schools**, 69, 109, 110.
- Summer School Mining Camp**, 73, 118, 119.
- Sumner, C.** (*B.*), 70, 83, 113, 115.
- Sumner, C.** (*Pr.*), 68, 97, 106.
- Sundry Funds**, 80.
- Sundry Gifts for books** (balances), 70, 113, 115.
- Sundry Gifts for services** (balances), 70, 114, 116.
- Surgical Laboratory**, 43, 75, 131, 134.
- Suspense, General:**
- Credit Balances**, 81.
- Debit Balances**, 82.
- Sweetser, I.** (*M., S.*), 77, 130, 133.
- Sweetser, I.** (*U.*), 60, 85.
- Swett, M. W.**, 76, 129.
- Swett, S. W.**, 76, 129.
- Swift** (*S.*), 67, 95.
- Taylor, J. T.** (*S.*), 77, 130, 133.
- Taylor, K. M.** (*B.*), 70, 113, 115.
- Teachers' and Pupils'**, 73, 144.
- Teachers' Endowment**, 20, 22, 47, 63, 90.
- Thaw** (*F.*), 49, 74, 146².
- Thayer** (*S.*), 67, 95, 104.
- Thayer, A. W.** (*Be.*), 68, 97, 156, 157.
- Thayer, J. E.**, 62, 156, 158.
- Theory and Practice, Anonymous Fund in the Department of**, 74, 76, 128.
- Thomas, G.** (*S.*), 67, 95, 104.
- Thomson Gift**, 43, 63, 99, 108.
- Thorndike, W. H.** (*Pr.*), 77, 130, 133.
- Tileston, T.**, 71, 123.
- Toppan** (*S.*), 67, 95, 104.
- Toppan, R. N.** (*Pr.*), 68, 97.
- Torrey, E.**, 62, 98.
- Torrey, H. W.**, 62, 98, 106.
- Townsend** (*S.*), 67, 95, 104.
- Townsend Estate**, 83.
- Townsend, M. P.**, 71, 123.
- Treadwell, D.**, 70, 83, 113, 114, 115.
- Treasurer's Office Expenses**, 86.
- Treat, J. H.** (*B.*), 20, 48, 70, 113, 115, 158.
- Tucker, I.** (*B.*), 47, 70, 113, 115.
- Tufts, Q.** (*Be.*), 68, 97, 105.
- Tufts, Q.** (*M.*), 76, 129.
- Turner, S.**, 60, 85.
- Tyndall, J.** (*F.*), 64, 92.
- 20th Mass. Regiment of Volunteer Infantry**, 20, 70, 113.
- University:**
- Funds**, 59.
- Schedule 7**, 84.
- Income**, 84-85.
- Expenditure**, 85-89.
- Schedule 10**, 116.
- Unknown Memorial**, 62, 91, 98, 106.

- Van Duzee, I. D. (S.),** 21, 67, 95.
Villard, H., 45, 62, 91.

Wadsworth, B. (Be.), 68, 97.
Walcott (S.), 67, 95, 104.
Walcott, H. P., 79, 154.
Walcott, H. P. (F., M.), 21, 48, 77, 129, 132.
Wales (P.), 47, 62, 91.
Wales, H. W. (B.), 70, 113, 115.
Walker, J. (B.), 70, 113, 115.
Walker, J. (F.), 64, 92, 102.
Walker, W. H., 76.
Ward, S., 47, 62, 98.
Ward, T. W. (B.), 70, 83, 113, 115.
Ward, W., 71, 123.
Ware, C. E., Memorial (F.), 77, 129, 132.
Ware, J., Memorial (F.), 77, 129, 132.
Warren (Anatomical Museum), 76, 131, 133.
Warren, C. M., 62, 98, 106.
Warren, H. C. (C.), 62, 91, 98, 106.
Warren, H. C. (Dental School), 77, 136.
Warren, H. C. (Exploration), 74, 83, 146.
Warren, S. C., 74, 146.
Washburn, P. (Pr.), 68, 97, 106.
Waterhouse, S., 62, 91.
Webb Estate, 83.
Weld (P.), 72, 126.
Weld, C. M. (S.), 67, 95, 104.
Weld, W. F., 45, 60, 85.
Wells, D. A. (P., Pr.), 69, 91, 98.
Welsh Memorial, J. P., 21, 47, 70, 113, 115.
Wendell, J. (S.), 67, 95, 104.

Wheeler, I. S., 62, 151.
Wheeler, S. W. (Be.), 68, 97.
Wheelock, J., 21, 62, 91.
White, A. T., 62.
Whiting (F.), 64, 92, 102.
Whiting (S.), 67, 95, 104.
Whitney, J. D. (S.), 67, 95, 104.
Whitney, Maria, 48, 73, 144.
Whitney, M. L. (S.), 67, 95, 104.
Wigglesworth Memorial, Edward, 80, 151.
Wigglesworth, E. (P.), 76, 131, 134.
Wigglesworth, E. (S.), 77, 130, 132.
Wigglesworth, G., 83, 151.
Wilder, C., 76, 156, 158.
Wilder, E. (Pr.), 21, 69, 98.
Willard (S.), 67, 95, 105.
William, Emperor, 74, 148.
Williams, D., 80, 156, 158.
Williams, H. W. (P.), 76, 129.
Winn (P.), 71, 123.
Winslow, S., 80, 85, 156, 158.
Winthrop, R. C. (S.), 74, 146.
Wister (Pr.), 21, 69, 98.
Wolcott, H. F., 74, 83, 146.
Wolcott, J. H. (B.), 70, 83, 113, 115.
Woodbury, Augustus (D.), 71, 123.
Woodbury, Augustus (S.), 67, 95.
Woodland Hill, 49, 78, 83, 156, 158.
Woods, A. (F.), 44, 92, 102.
Wright, C., 62, 98.
Wright, E., 70, 114.
Wyman, C. (S.), 67, 95, 105.

X-ray Apparatus (M.), 76, 131, 134.
Zoölogy Department, 100, 107, 109.

OFFICIAL REGISTER OF HARVARD UNIVERSITY

*[Registered, March 24, 1905, at Boston, Mass., as second-class matter,
under Act of Congress of July 16, 1894.]*

Issued at Cambridge Station, Boston, Mass., twice a month from October to
March inclusive, six times a month from April to September inclusive.

These publications include :—

The Annual Reports of the President and of the Treasurer.
The Annual University Catalogue.

The Annual Catalogues of the College and the several Professional Schools of the University; the Descriptive Pamphlet; the Announcements of the several Departments; etc., etc.

**This book is under no circumstances to be
taken from the Building**

[illegible]

